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The Trade Wind Zone Oceanography Pilot Study Part III: Townsend Cromwell Cruises 8, 9, and 10 September to November 1964

By Robert L. Charnell, David W. K. Au, and Gunter R. Seckel

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FISH AND WILDLIFE SERVICE
BUREAU OF COMMERCIAL FISHERIES

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The Trade Wind Zone Oceanography Pilot Study Part III: Townsend Cromwell Cruises 8, 9, and 10 September to November 1964

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ABSTRACT

A standard grid of oceanographic stations in an area bounded by lat. 10° and 26° N., and long. 148° and 157° W., was occupied at monthly intervals between February 1964 and June 1965. For the third set of three cruises, Townsend Cromwell cruises 8, 9, and 10, September to November 1964, oceanographic station data are tabulated, BT data are presented in vertical sections, and the distribution of surface temperature, surface salinity, and surface dynamic height relative to 1,200 m. for cruises 8 and 9 and 1,000 m. for cruise 10. Methods and procedures as well as the limitations of the data are discussed.

INTRODUCTION

This is the third of a series of reports presenting physical oceanographic data of the Trade Wind Zone Oceanography Pilot Study conducted by the Bureau of Commercial Fisheries Biological Laboratory, Honolulu. The data were obtained during a series of 16 monthly cruises between February 1964 and June 1965 over a set station pattern in an area near the Hawaiian Islands bounded approximately by lat. 10° and 26° N. and long. 148° and 157° W.

The complete set of observations represents a three-dimensional time-sequence distribution of properties (temperature, salinity....) in the trade wind zone of the central North Pacific. It is a pilot study of an investigation in which seasonal changes in the distribution of properties are to be explained in terms of 1) seasonal changes in the processes of net heat and water exchange across the sea surface, and 2) the effects of seasonal changes in wind stress and water motion. The Trade Wind Zone Oceanography Program was planned by Gunter R. Seckel and is carried out under his direction by HL (Bureau of Commercial Fisheries Biological Laboratory, Honolulu).

This report contains the BT (bathythermograph) and oceanographic station data for the 8th, 9th, and 10th cruises in the series. (Townsend Cromwell cruise 7 was a trawling cruise, not part of this series, and is not reported here.) Figure 1 shows the cruise track for the three cruises and gives the position of the Nansen bottle oceanographic casts and the BT casts.

All cruises were made by the R/V Townsend Cromwell. Cruises 8 and 10 were commanded by Captain Robert E. K. D. Lee, with officers Jan Liefting and Pete Andrich; cruise 9 was commanded by Acting Master Jan Liefting, with Acting First Officer Pete Andrich. The scientific parties were composed of the following:

Townsend Cromwell, cruise 8:
September 1 to 20, 1964

David W. K. Au - HL - Field Party Chief
Claude E. Allen - HL

Note.--Robert L. Charnell, Oceanographer, presently with Hazelton Nuclear Science Corp., Palo Alto, California 94303, formerly with Bureau of Commercial Fisheries Biological Laboratory, Honolulu, Hawaii; David W. K. Au, Physical Science Technician and Gunter R. Seckel, Oceanographer, Bureau of Commercial Fisheries Biological Laboratory, Honolulu, Hawaii 96812.

Theodore K. Hirota - HL
Lloyd T. Watarai - HL
George F. Heimerdinger - National Oceanographic Data Center
Roger B. Clapp - Smithsonian Institution
Dayle N. Husted - Smithsonian Institution

Townsend Cromwell, cruise 9:
October 1 to 20, 1964

Robert L. Charnell - HL - Field Party Chief
Arthur M. Bauckham, Jr. - HL
Robert M. Moncrief - HL
Lloyd T. Watarai - HL
Paul LaViolette - U.S. Naval Oceanographic Office
Dayle N. Husted - Smithsonian Institution
Warren King - Smithsonian Institution

Townsend Cromwell, cruise 10:
November 4 to 24, 1964

Everet C. Jones - HL - Field Party Chief
Claude E. Allen - HL
Arthur M. Bauckham, Jr. - HL
Robert M. Moncrief - HL
R. J. Grishow - U.S. Naval Oceanographic Office
Dayle N. Husted - Smithsonian Institution
Warren King - Smithsonian Institution

OBSERVATIONS[1/]

In addition to the regular Nansen and BT casts shown in figure 1, BT casts were made at 18.5-km. (10-nautical-mile) intervals for studies of variability between stations 2 and 4, 17 and 19, and 23 and 25.

To supplement the physical oceanographic data presented in this report, additional information of the following types was obtained.

Biological

A 1/2-hour surface plankton tow was taken daily at 2000 hours with a 1-m. net. Flyingfish which stranded themselves on deck were collected daily. Regular observations of fish schools, sea mammals, and birds were supplemented by more detailed bird counts by observers from the Smithsonian Institution.

Meteorological

Rain measurements as well as standard weather observations were taken four times daily. Radiation from sun and sky was measured and recorded daily with an Eppley[2/] pyranometer. These observations were supplemented by daily color photographs of clouds.

Current

Ten plastic-enclosed drift cards, described by Barkley, Ito, and Brown (1964), were released at each BT cast. An additional 10 cards were released at hourly intervals during the first and last 12 hours of cruise 9 and during the first 12 and last 9 hours of cruise 10.

PREPARATION OF DATA

Standard oceanographic procedures were employed in the preparation of the data for this report. Salinity determinations were made on the University of Washington salinity bridge (Paquette, 1958). Duplicate determinations were made with an induction salinometer. When values differed more than 0.02 °/oo, the salinity was redetermined on the U.W. salinity bridge, and the mean of the salinity bridge determinations was reported. Oxygen concentrations were determined by the modified Winkler method (Thompson and Robinson, 1939). Inorganic PO_4-P was determined by the procedure of Robinson and Thompson (1948) as modified at the University of Washington. All thermometers had been calibrated at HL since April 1962. The reported temperatures are estimated to be accurate to ±0.02° C. Application of corrections to protected and unprotected thermometer readings and computations of thermometric depths and L-Z values were performed with an IBM 7040 digital computer at the University of Hawaii Computing Center with a program written at HL. Depths were determined by the use of values from the L-Z curve for the actual depth. This procedure gave depth estimated to be within ±10 m. down to 1,000 m. and within ±1 percent below 1,000 m.

Sigma-t, specific volume anomaly, and the dynamic height were computed on the IBM 7040 computer by the program prepared at HL and based on equations given by LaFond (1951).

[1/] All data not presented in this report are on file at the Bureau of Commercial Fisheries Biological Laboratory, Honolulu, Hawaii 96812

[2/] Trade names referred to in this publication do not imply endorsement of commercial products.

The computer also was used to interpolate all properties at standard depths by means of a subroutine furnished by the University of Washington Oceanography Department and based on the interpolation method outlined by Rattray (1962).

In the region of study, a sharp thermocline generally separates a surface mixed layer from the subsurface waters. Only infrequently do Nansen casts adequately define this configuration, with the result that the interpolation program provides inaccurate values for temperature. BT data were used to correct the temperature-depth curve in the thermocline and the isothermal layer. When necessary, a value of temperature was chosen from the corrected curve at standard depths in the mixed layer and upper thermocline and, with the corresponding salinity value from the T-S curve, was used with the Nansen cast data in the interpolation program. The resulting interpolated values were much nearer the actual oceanographic situation as implied by the BT trace.

To estimate the validity of values for the surface distribution charts, the surface bucket values of temperature and salinity were compared, for each cruise, with values from the surface Nansen bottles. For temperature, variation was fairly random so that the mean of the difference between the two values was well within the accuracy of the surface bucket thermometer. The root mean square value computed from the above differences was less than 0.2° C. Except for cruise 10 the bucket salinity values were usually larger than the Nansen bottle values, most probably owing to salt contamination at the time of sampling. The mean of the differences was about 0.03 °/oo and the root mean square value was within 0.15 °/oo for each cruise.

PRESENTATION OF DATA

For each of the three cruises the original as well as derived data and section plots for the properties have been included.

Tables 1, 2, and 3 contain the oceanographic station data for cruises 8, 9, and 10, respectively. In addition to the position, date, and time at each station, weather and sea conditions in standard notation have been included in the heading of each station. The first five columns of each station listing show the observed depth, temperature, salinity, oxygen, and phosphate, respectively; the next two columns contain calculated sigma-t and specific volume anomaly for the observed data. The next three columns present the interpolated values of temperature and salinity at standard depths and the last three columns contain sigma-t and the specific volume anomaly calculated from the interpolated data and the anomaly of dynamic height summed from the surface. The error terms, defined by the Rattray interpolation technique, that exceeded 0.10 for temperature and 0.05 for salinity have been noted below the tabulation for each station. Interpolated and extrapolated values as well as irregularities in the original data are noted in these tables.

Temperature distribution sections along long. 148° W., 151° W., 154° W., and 157° W. based on the 270-m. BT's are included; so are the shorter zonal sections between stations 7 and 7A, 25 and 26, and 37 and 40. In addition, surface temperature and salinities are presented with each section. All the sections were plotted automatically by the model 566 Calcomp plotter with a program designed at HL. These seven BT sections are shown in figures 2 through 7 for cruise 8, figures 8 through 13 for cruise 9, and figures 14 through 19 for cruise 10.

The surface temperature distributions, based on bucket temperature at each BT cast, are shown in figures 20, 21, and 22 for cruises 8, 9, and 10, respectively.

The surface salinity distributions, based on bucket salinity samples at each BT cast, are shown in figures 23, 24, and 25 for cruises 8, 9, and 10, respectively.

The dynamic topography, relative to 1,200 m. for cruises 8 and 9 and 1,000 m. for cruise 10, is shown in figures 26, 27, and 28, respectively.

ACKNOWLEDGMENTS

The data for these cruises were processed by HL personnel under the direction of Mary Lynne Godfrey. Betty Ann L. Keala did the computer programing.

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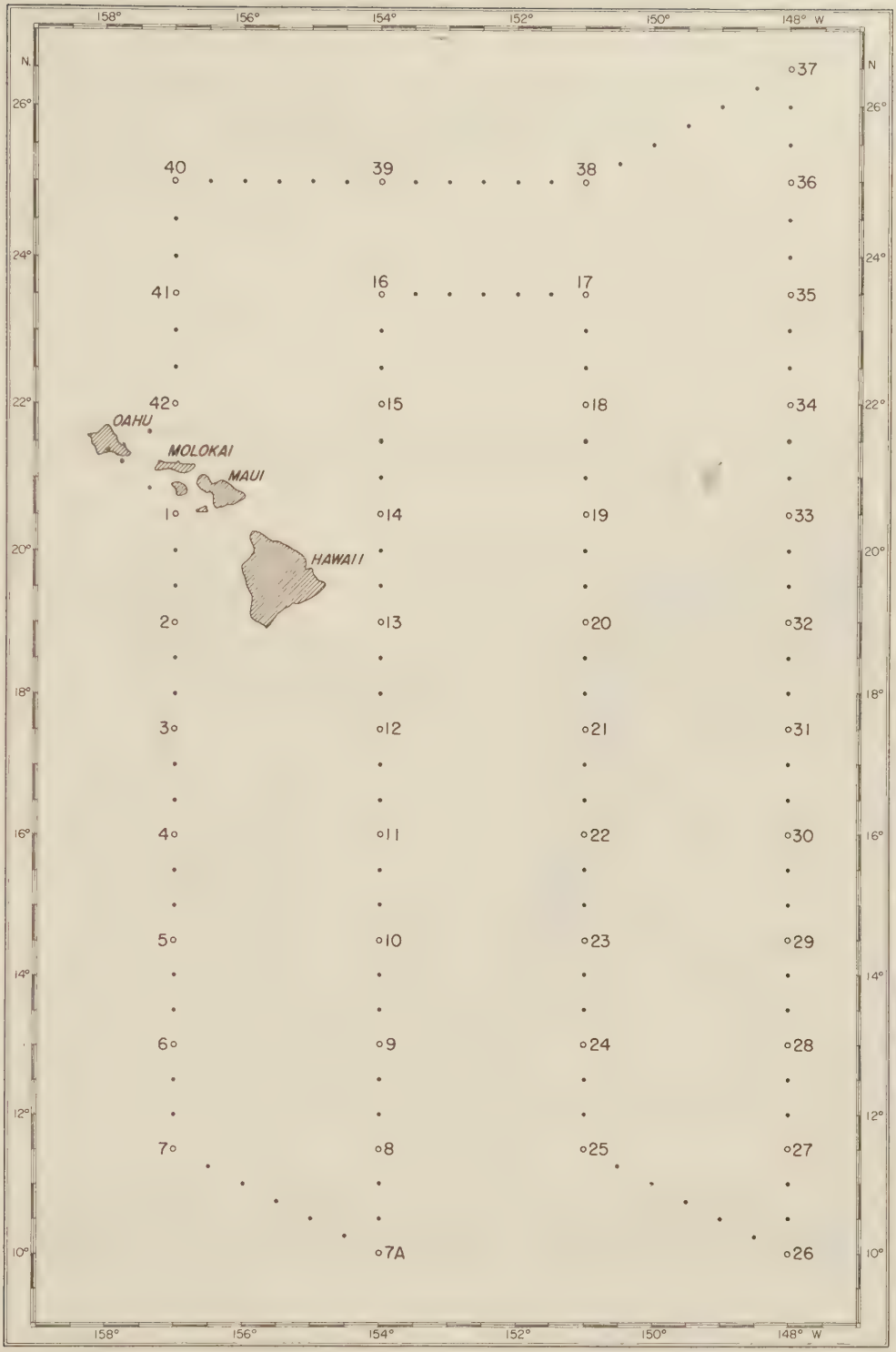


Figure 1.--Track chart for Townsend Cromwell cruises 8, 9, and 10. The large, numbered dots indicate the locations at which both hydrographic and BT (bathythermograph) casts were made; the smaller dots indicate locations at which only BT casts were made.

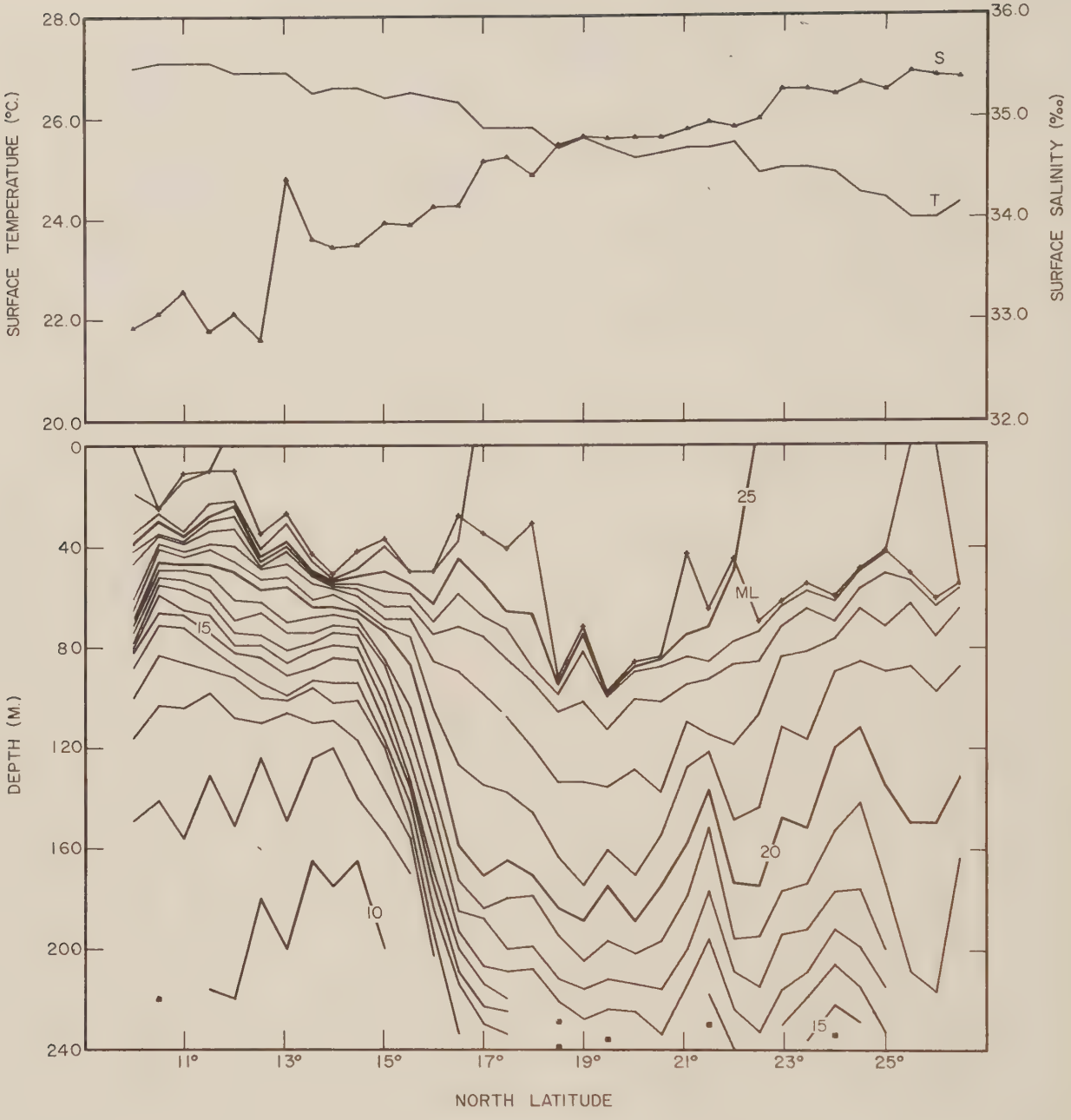
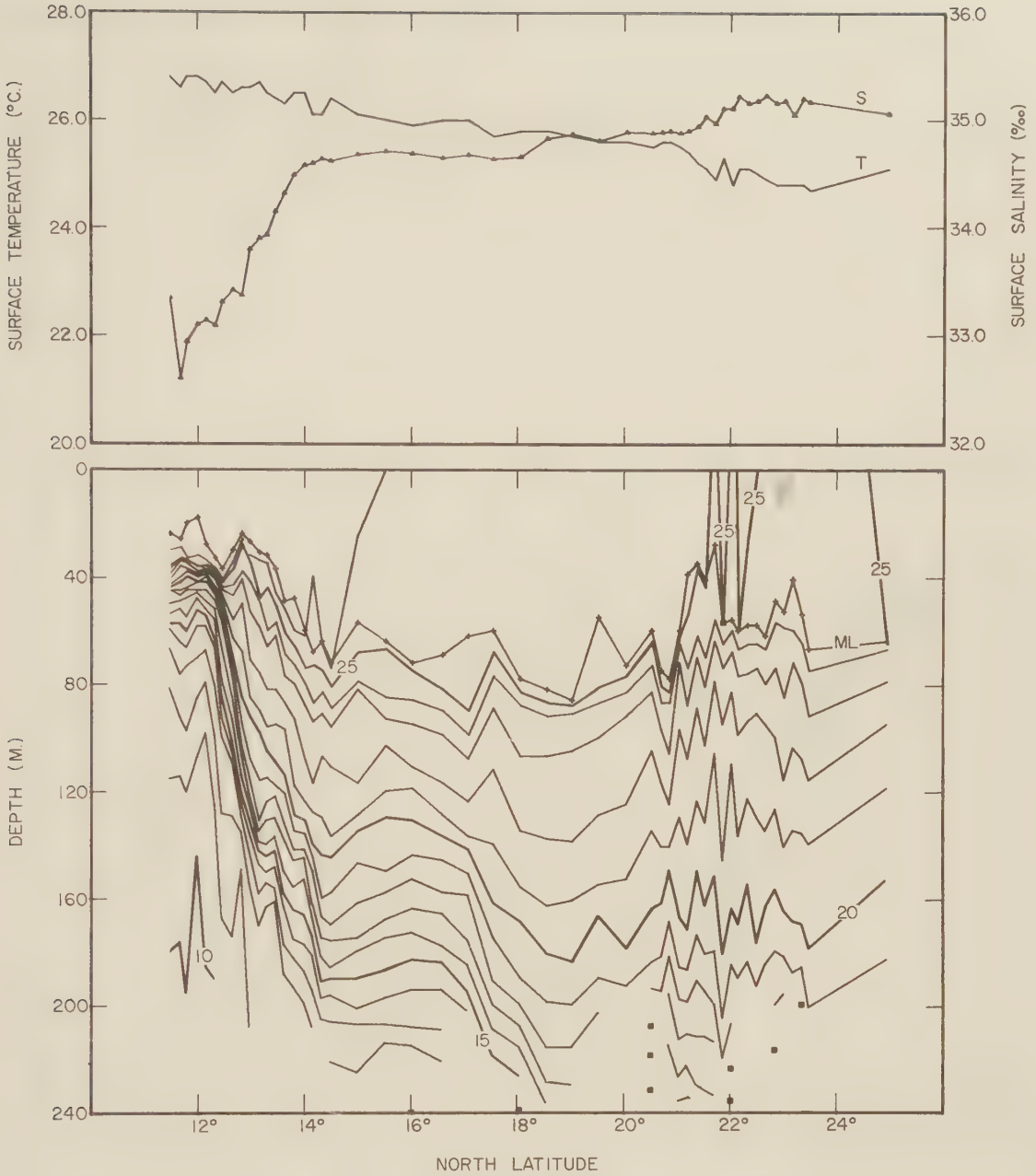


Figure 2.--Surface temperatures (° C.) and salinities (°/oo) (upper panel) and BT temperature (° C.) section (lower panel) for Townsend Cromwell cruise 8 along long. 148° W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.



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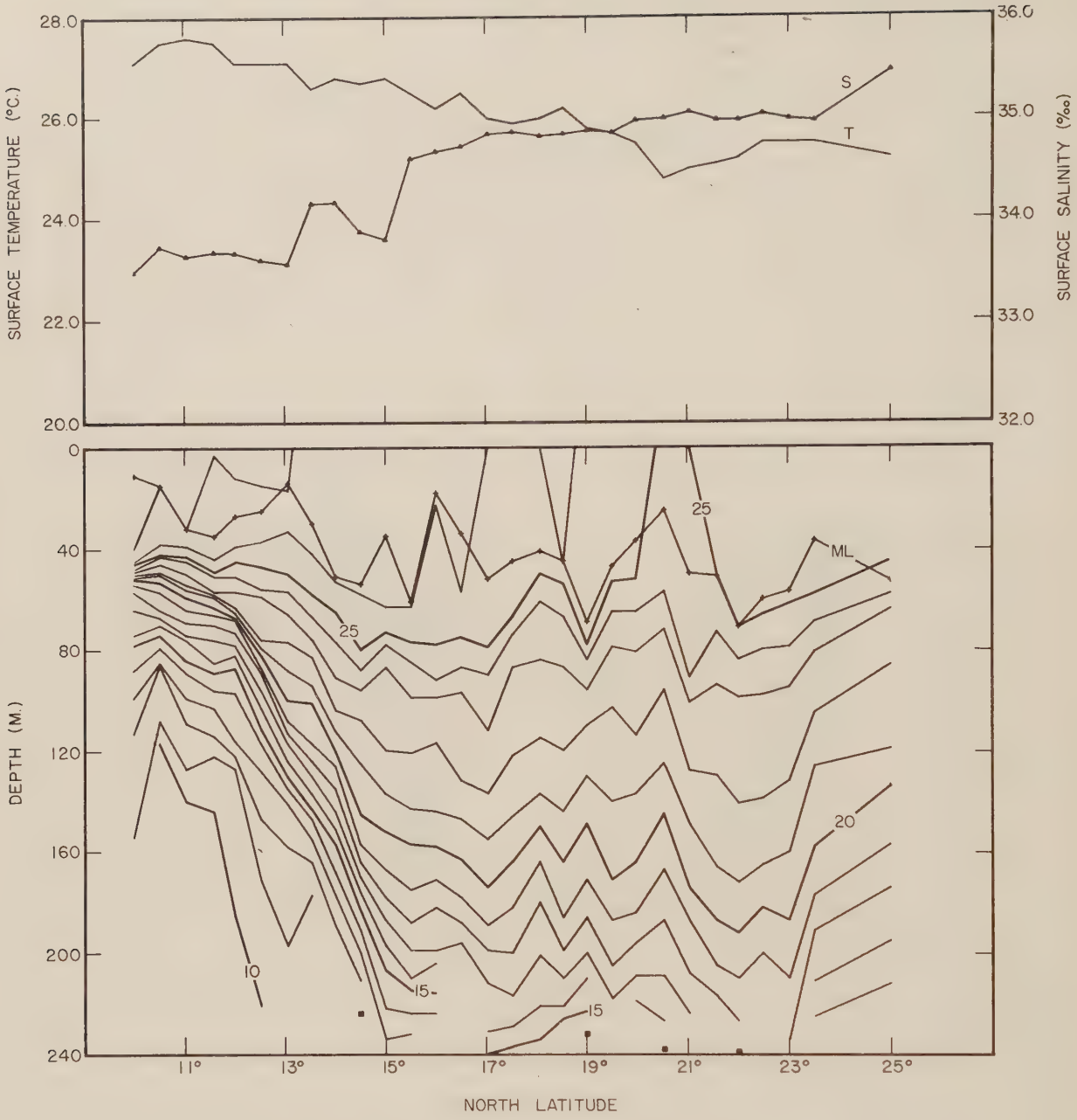

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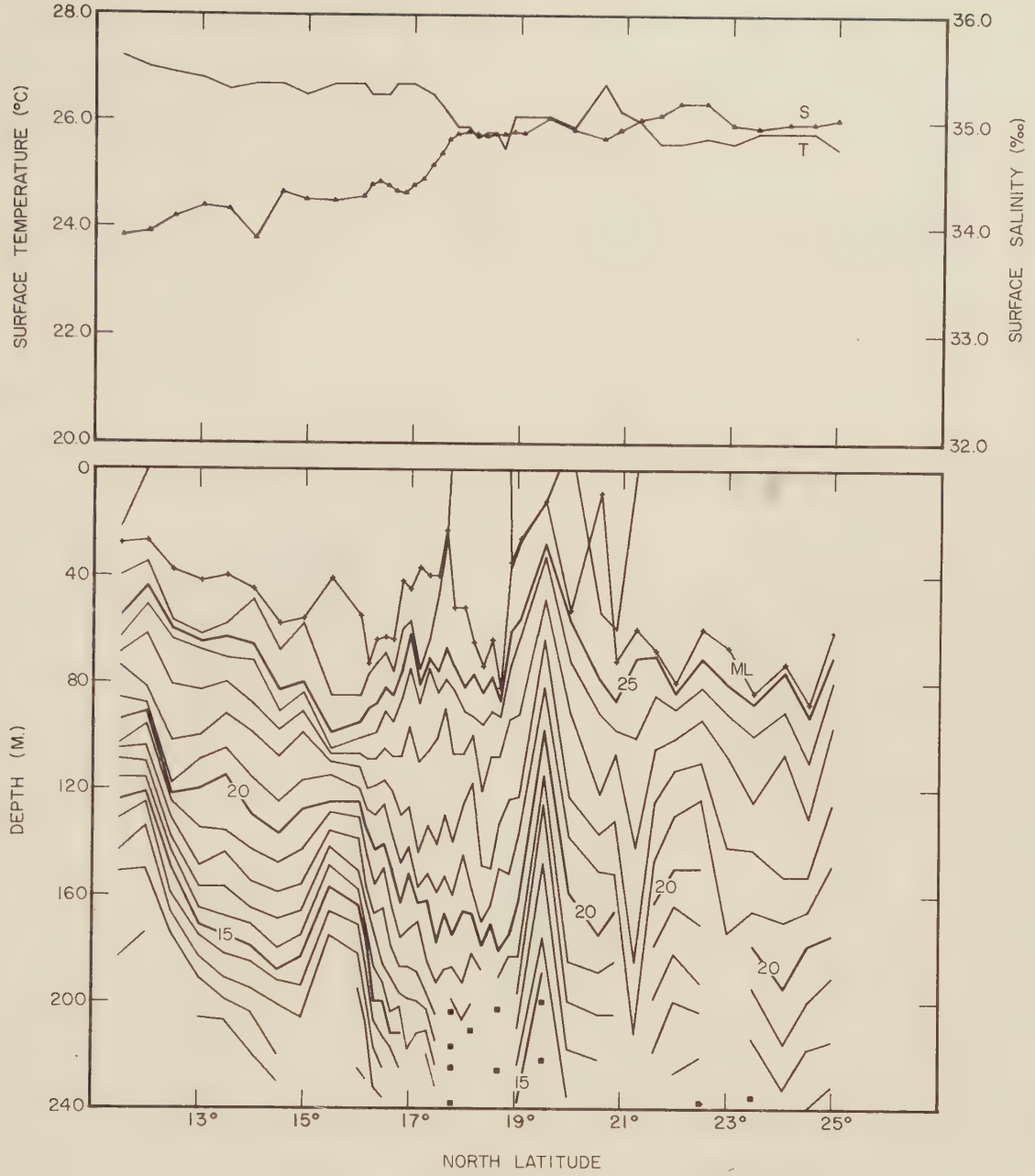

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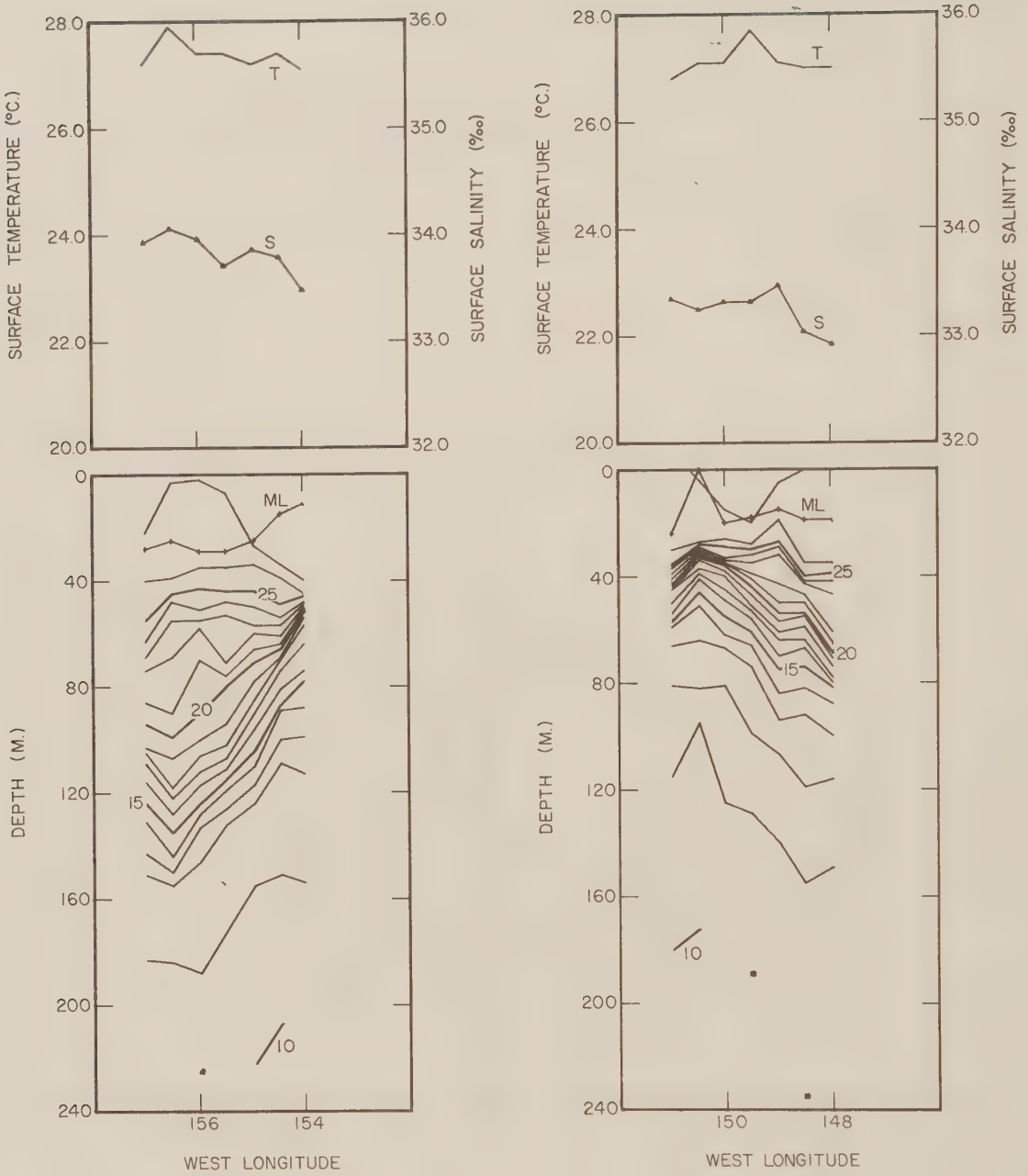

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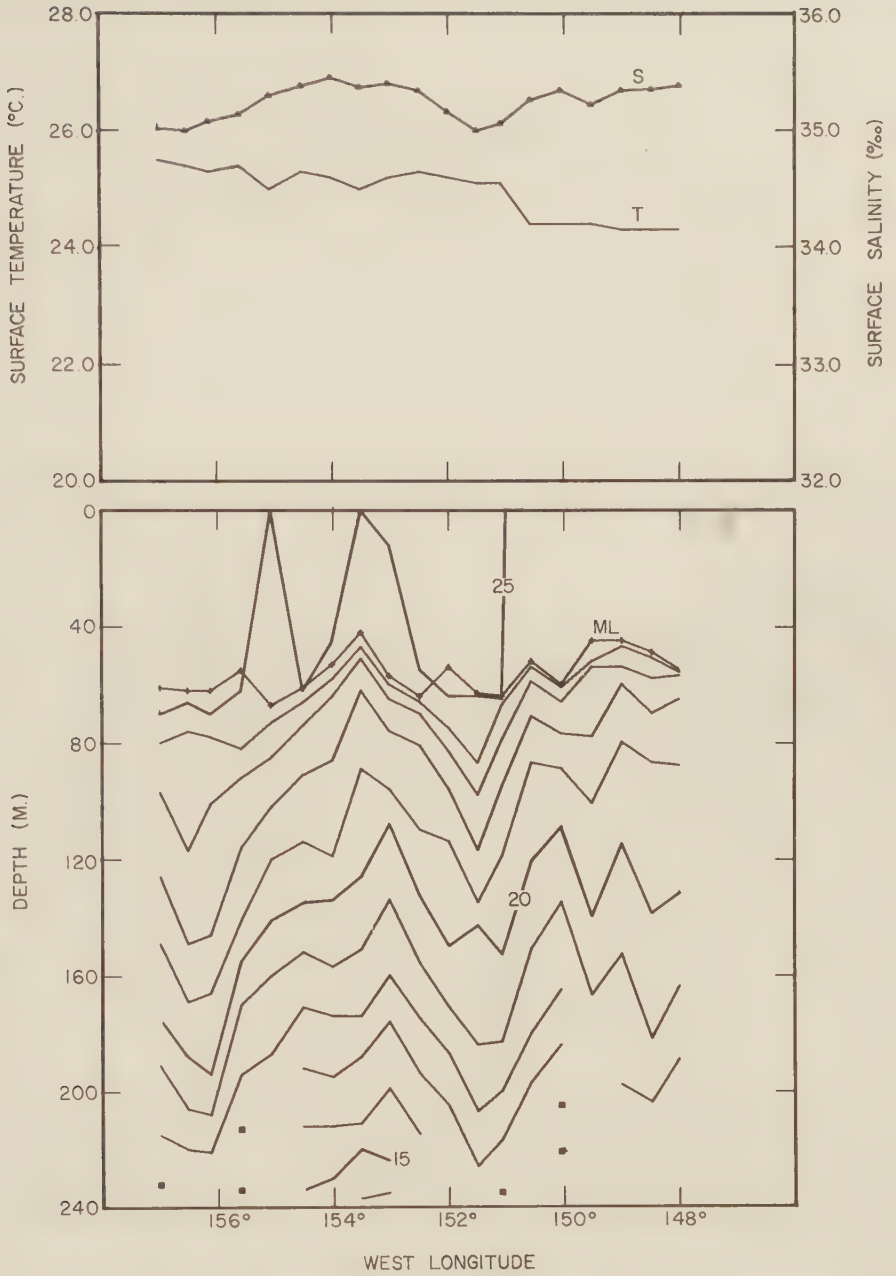

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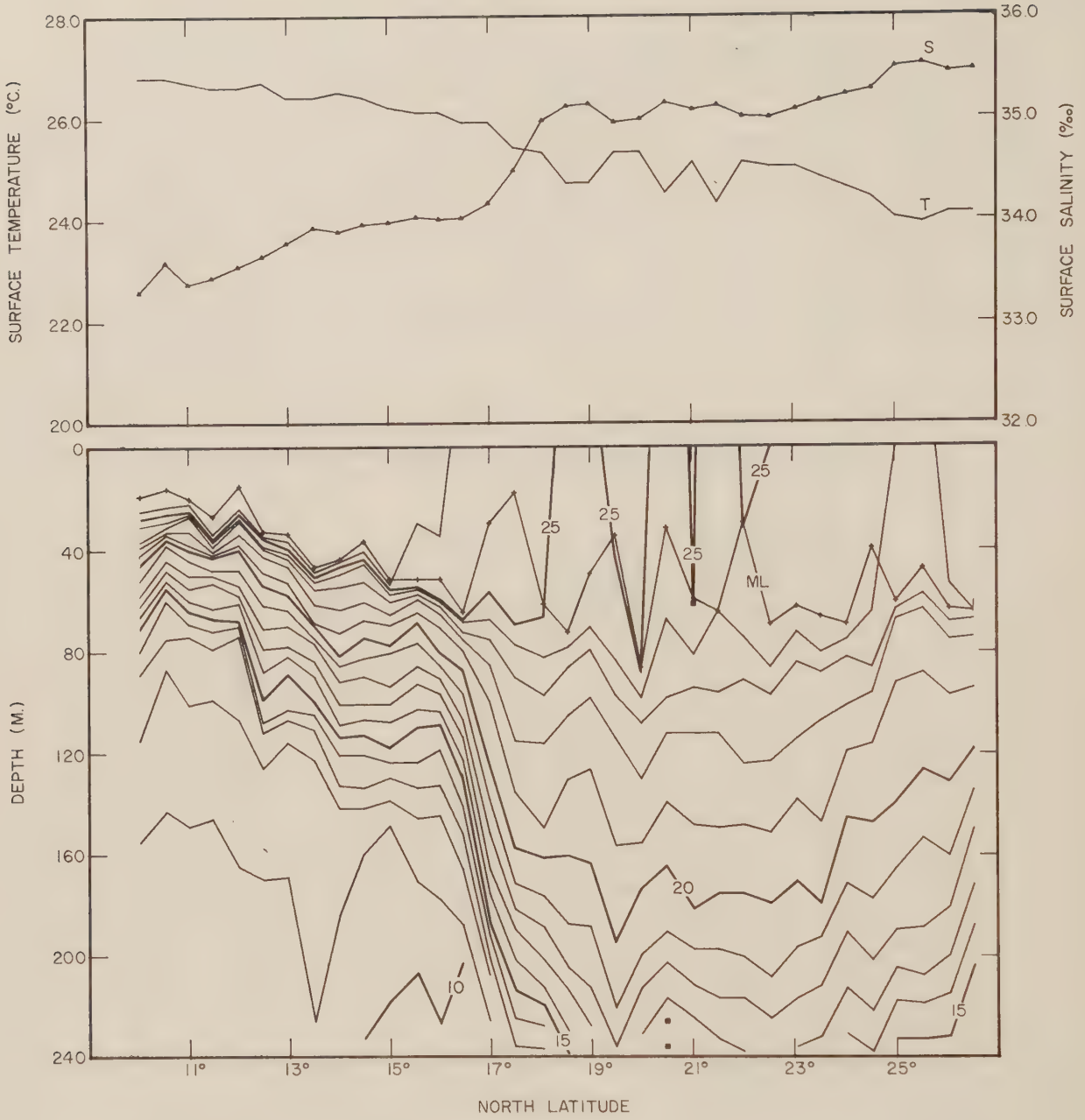

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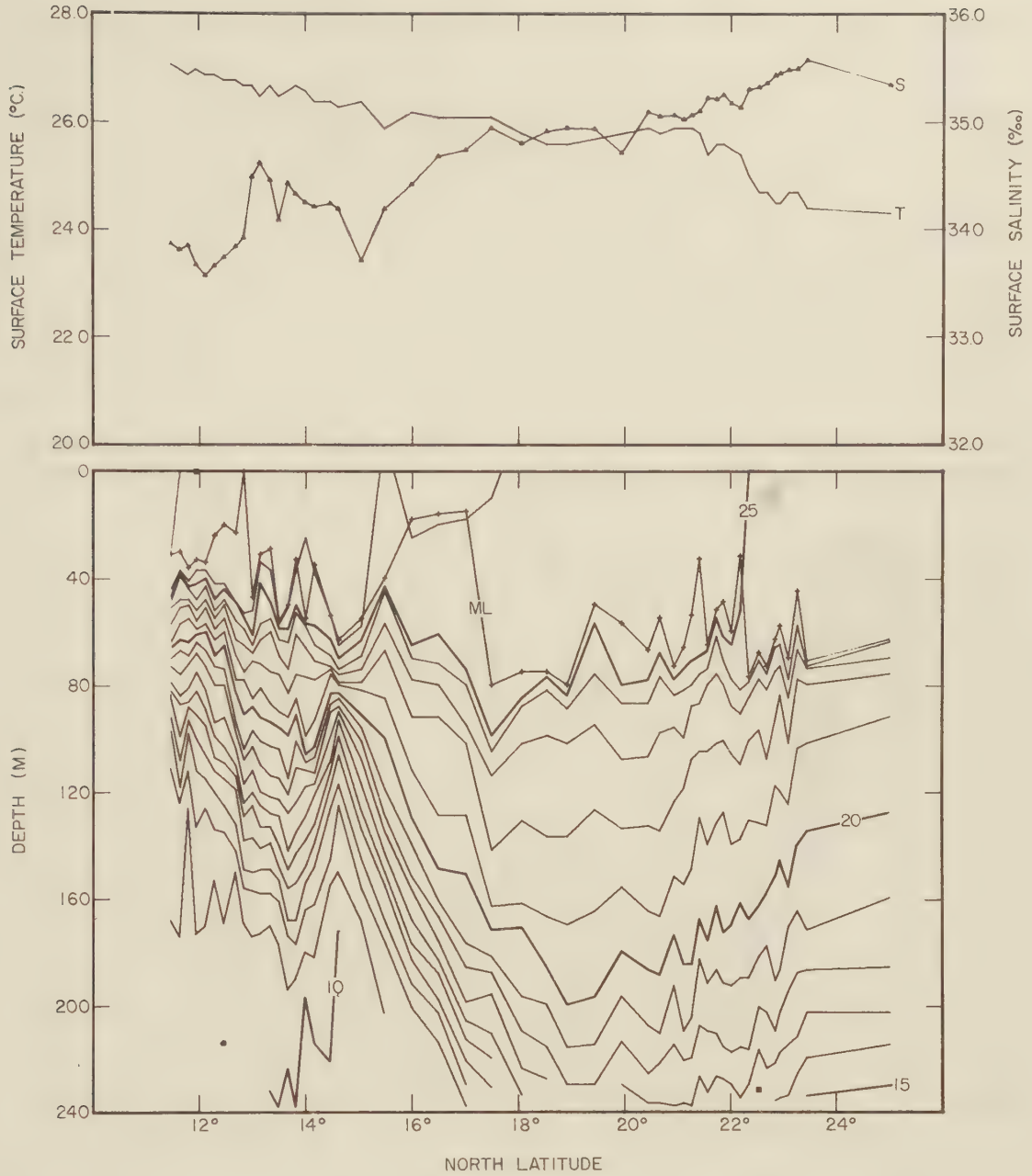

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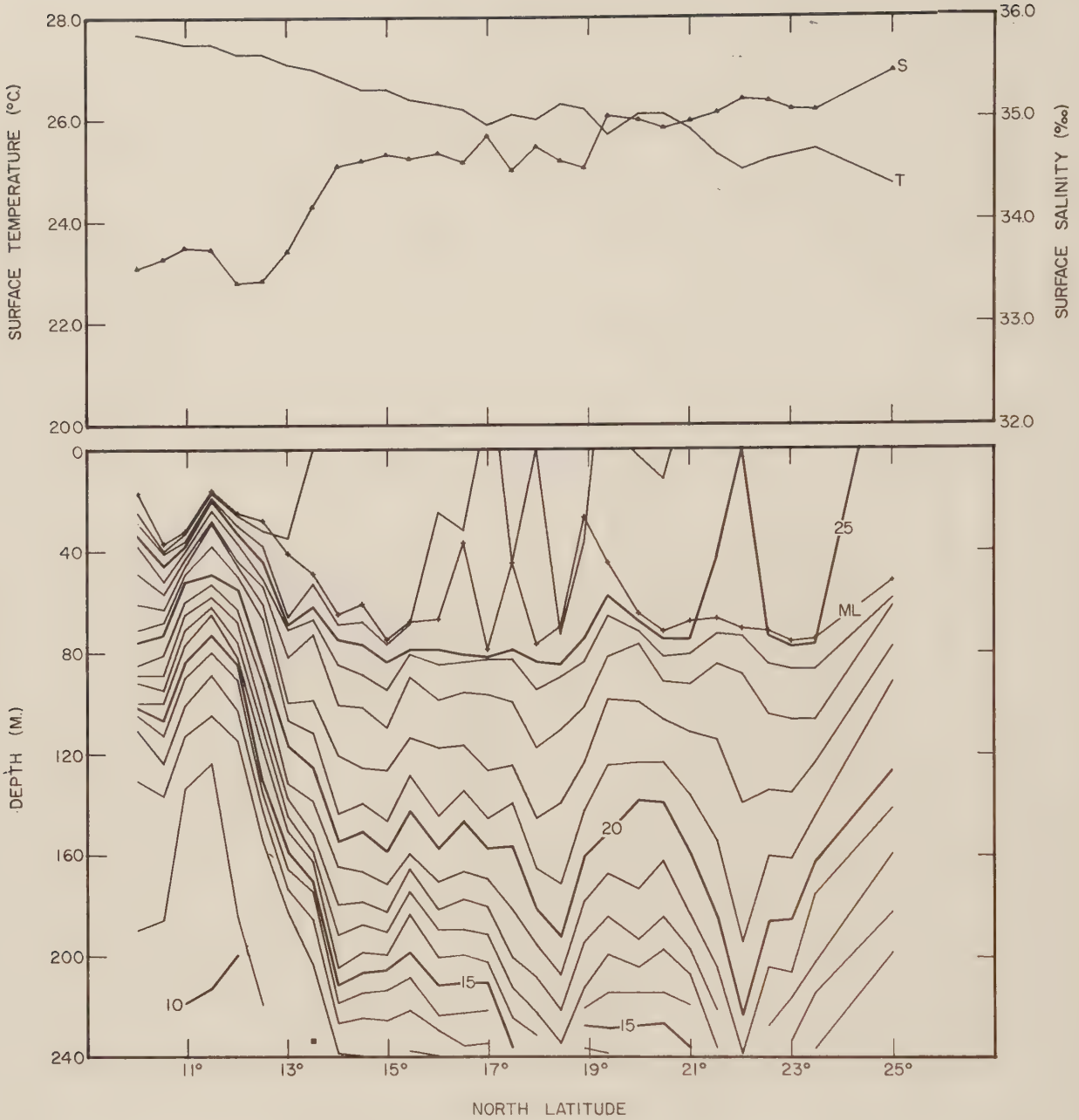

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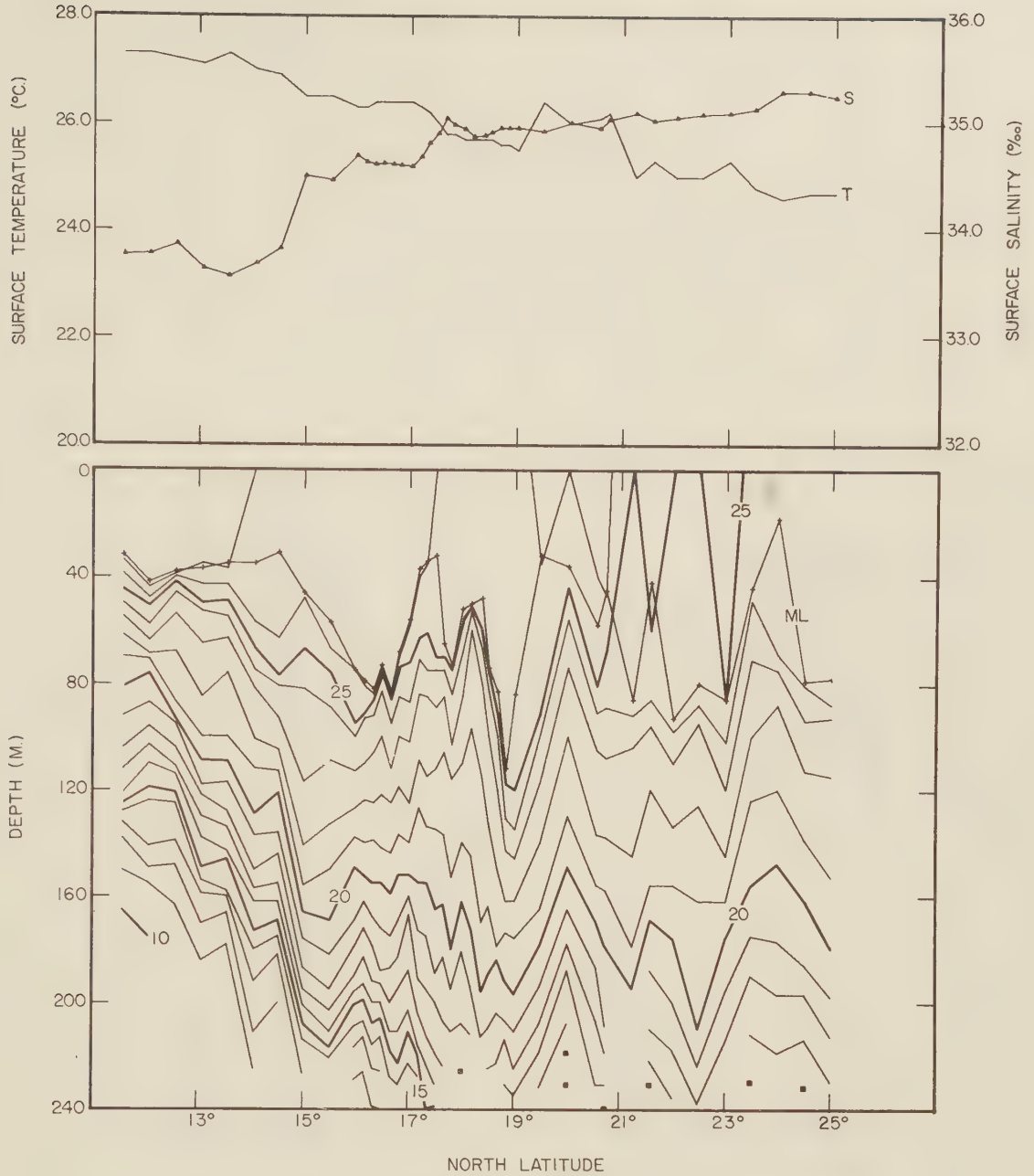

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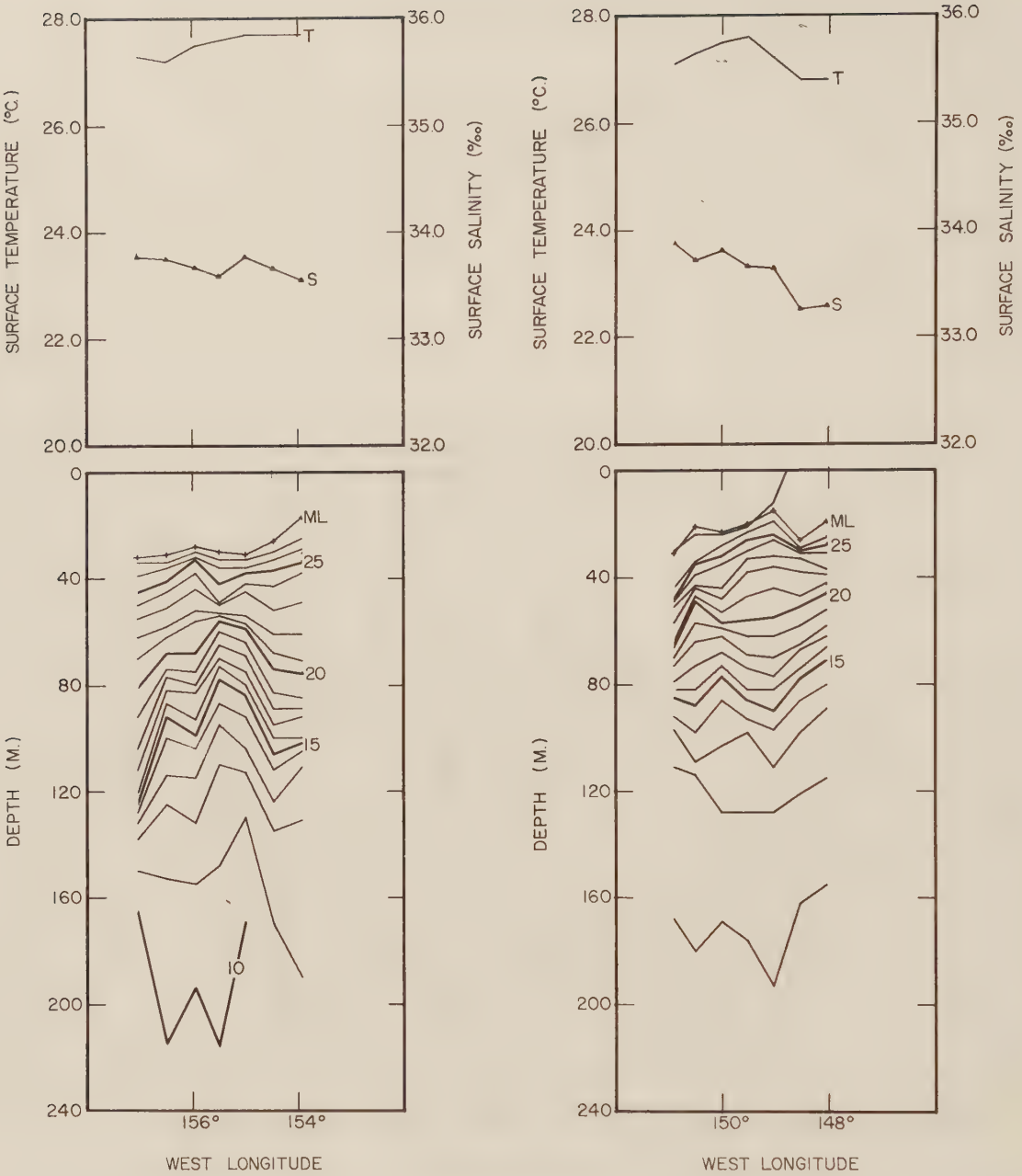

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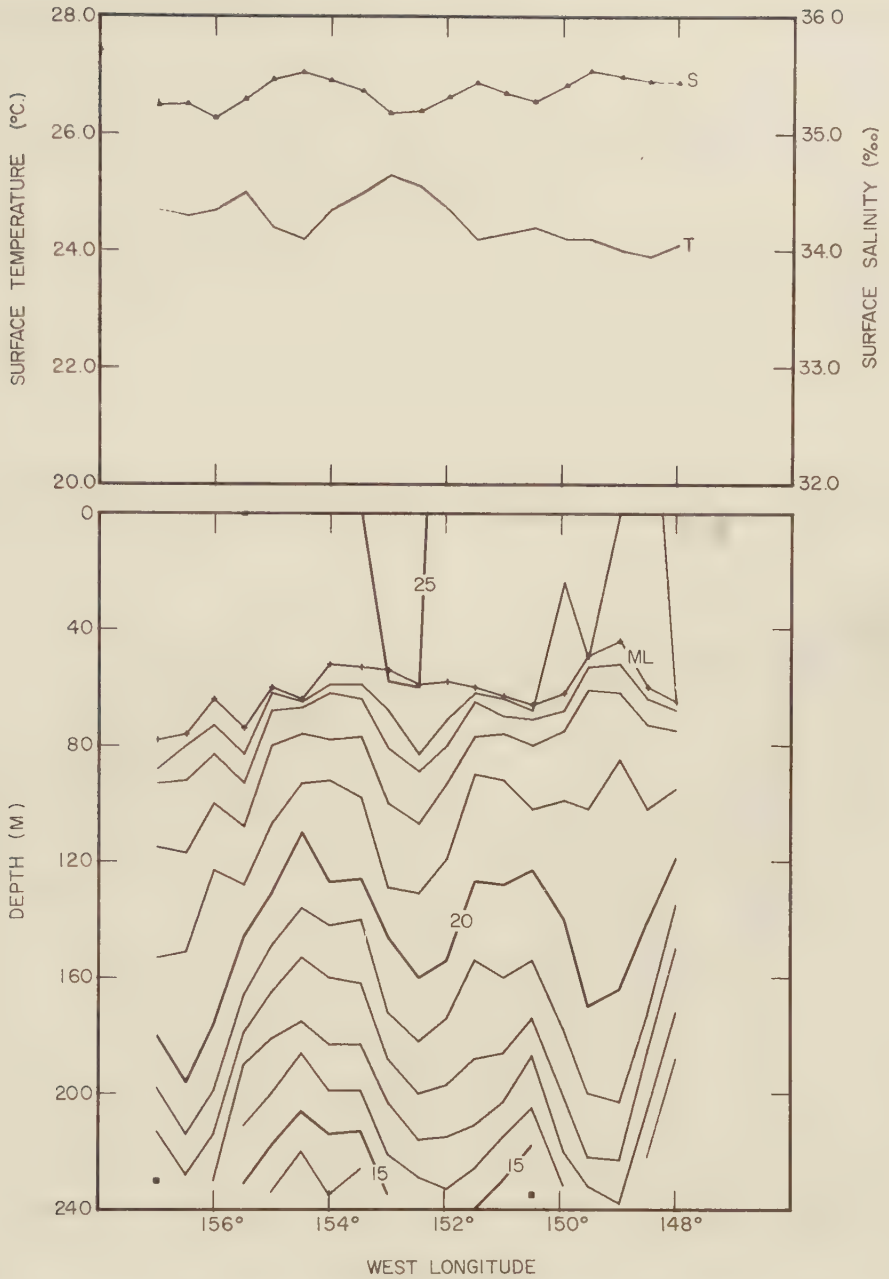

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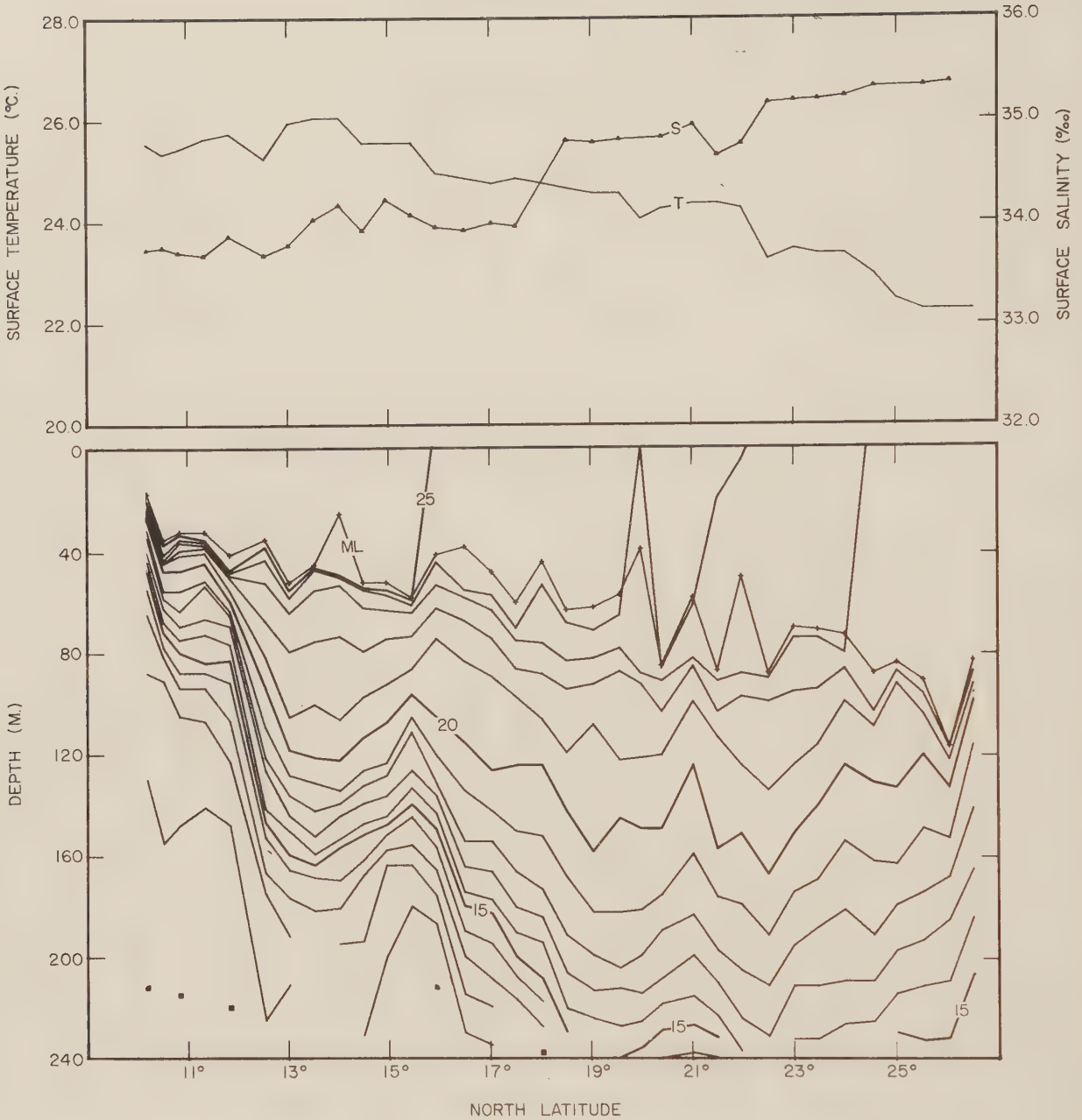

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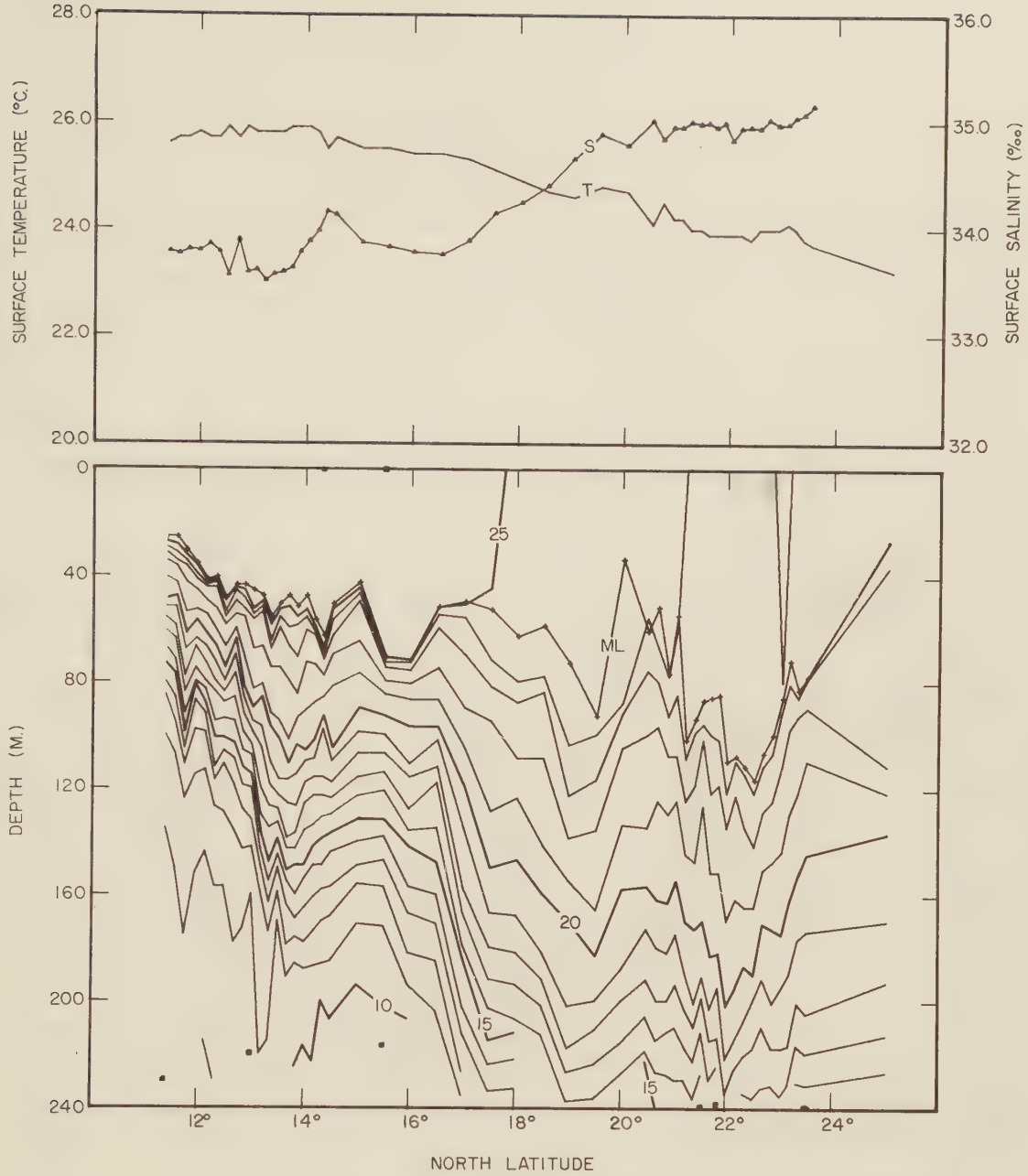


Figure 15.--Surface temperatures (° C.) and salinities (°/oo) (upper panel) and BT temperature (° C.) section (lower panel) for Townsend Cromwell cruise 10 along long. 151° W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

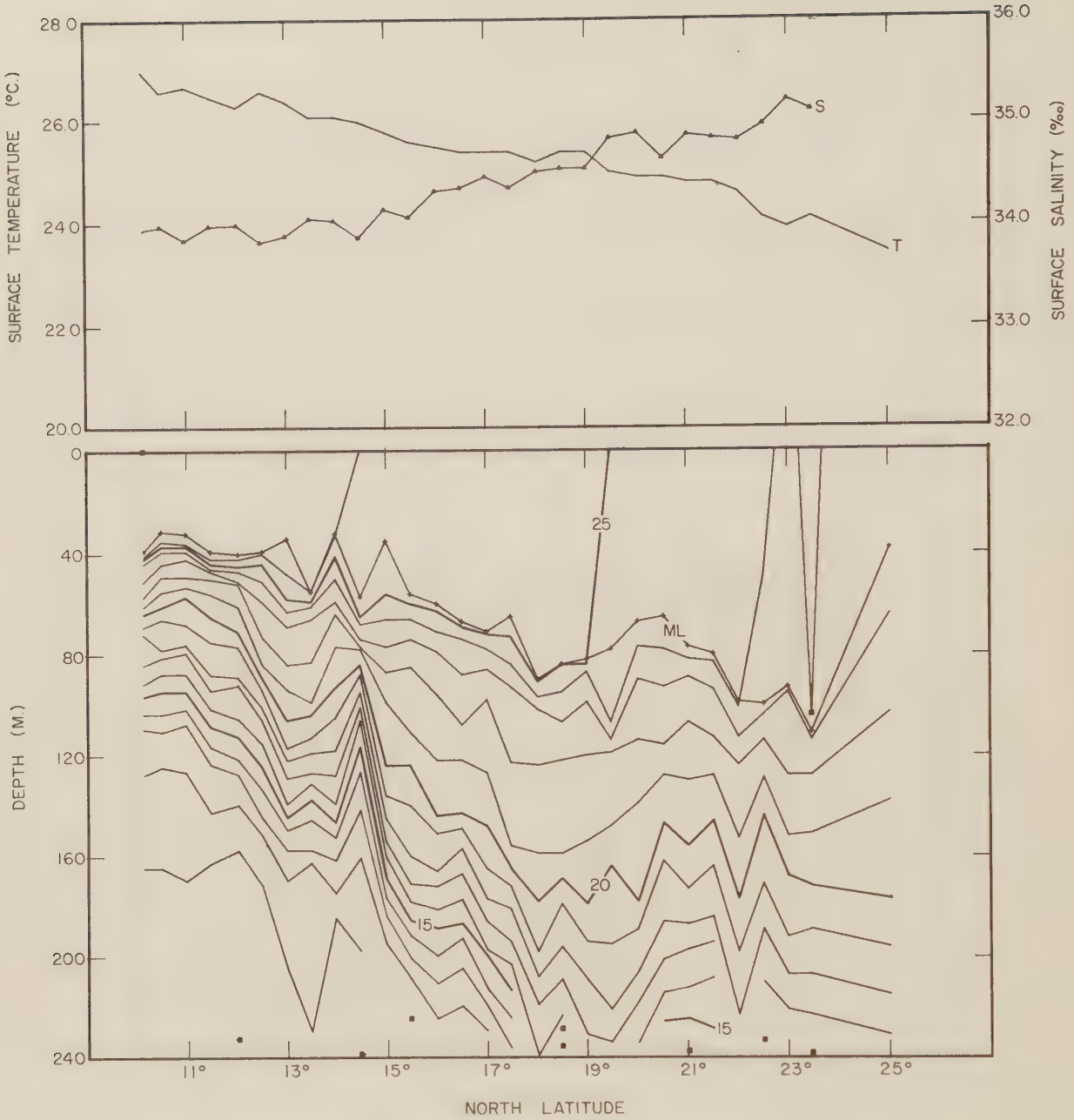


Figure 16.--Surface temperatures (° C.) and salinities (°/oo) (upper panel) and BT temperature (° C.) section (lower panel) for Townsend Cromwell cruise 10 along long. 154° W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

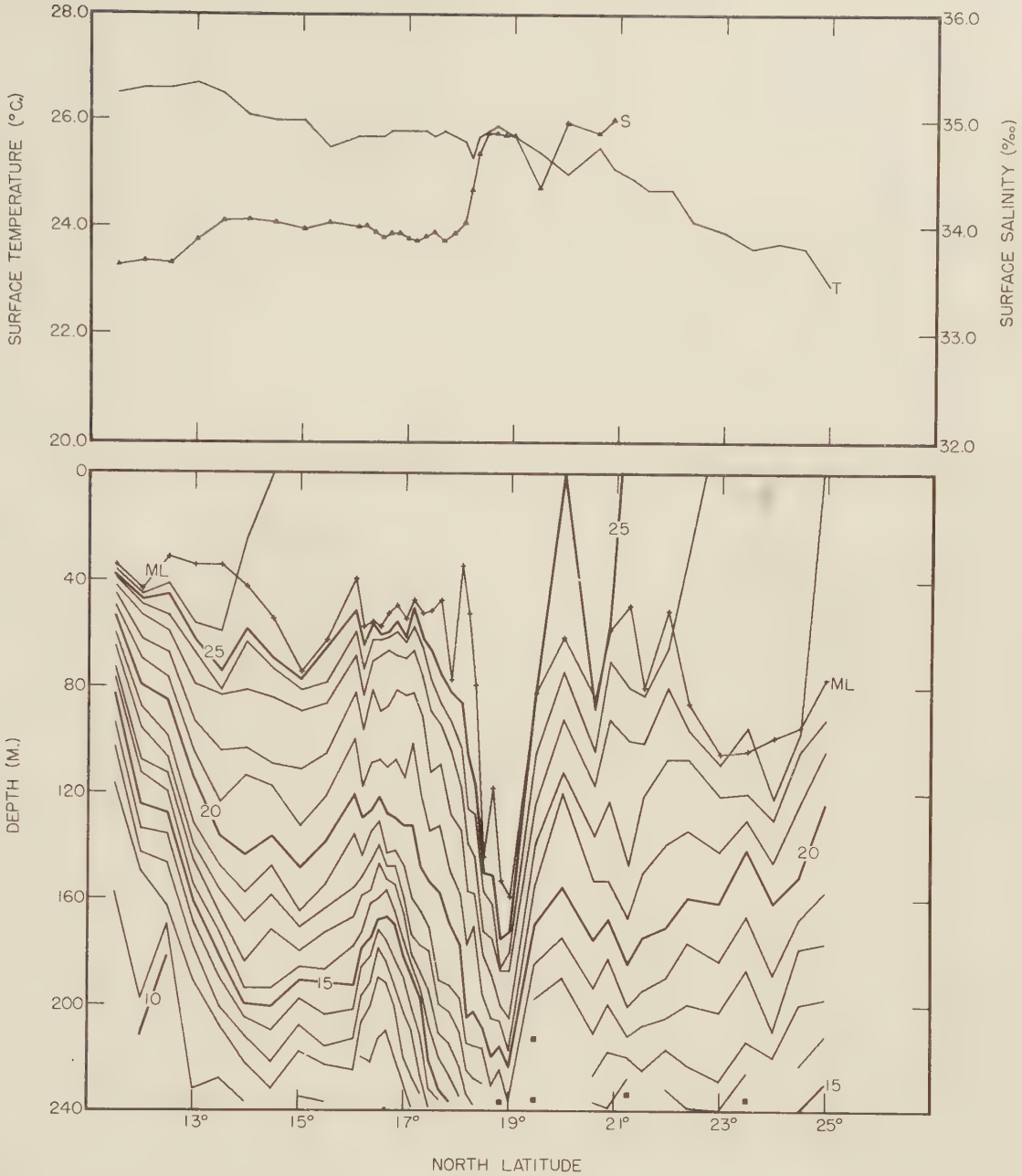


Figure 17.--Surface temperatures (° C.) and salinities (°/oo) (upper panel) and BT temperature (° C.) section (lower panel) for Townsend Cromwell cruise 10 along long. 157° W. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

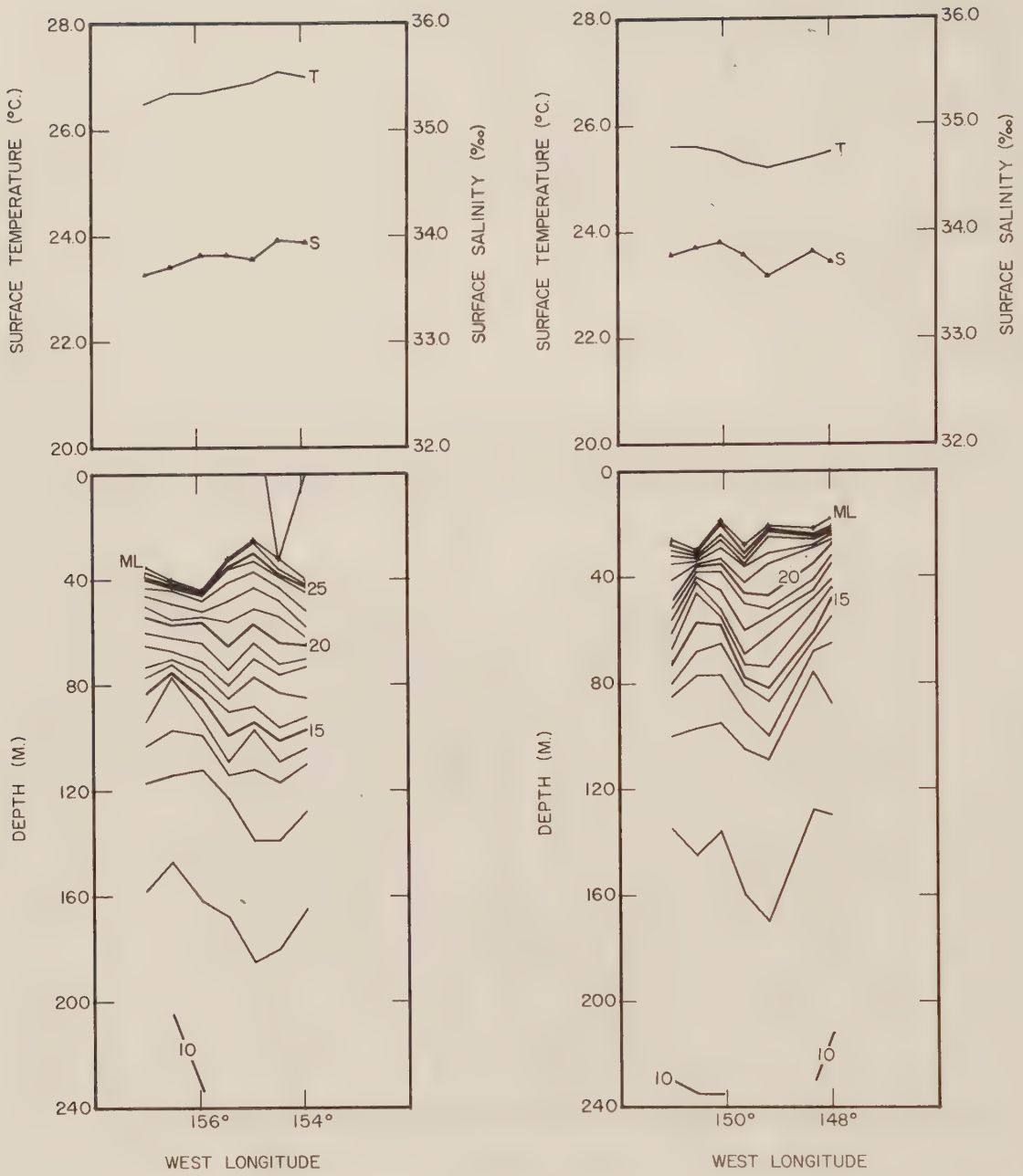


Figure 18.--Surface temperatures (° C.) and salinities (°/oo) (upper panel) and zonal BT temperature (° C.) section (lower panel) for Townsend Cromwell cruise 10 between stations 7 and 7A, 25 and 26. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

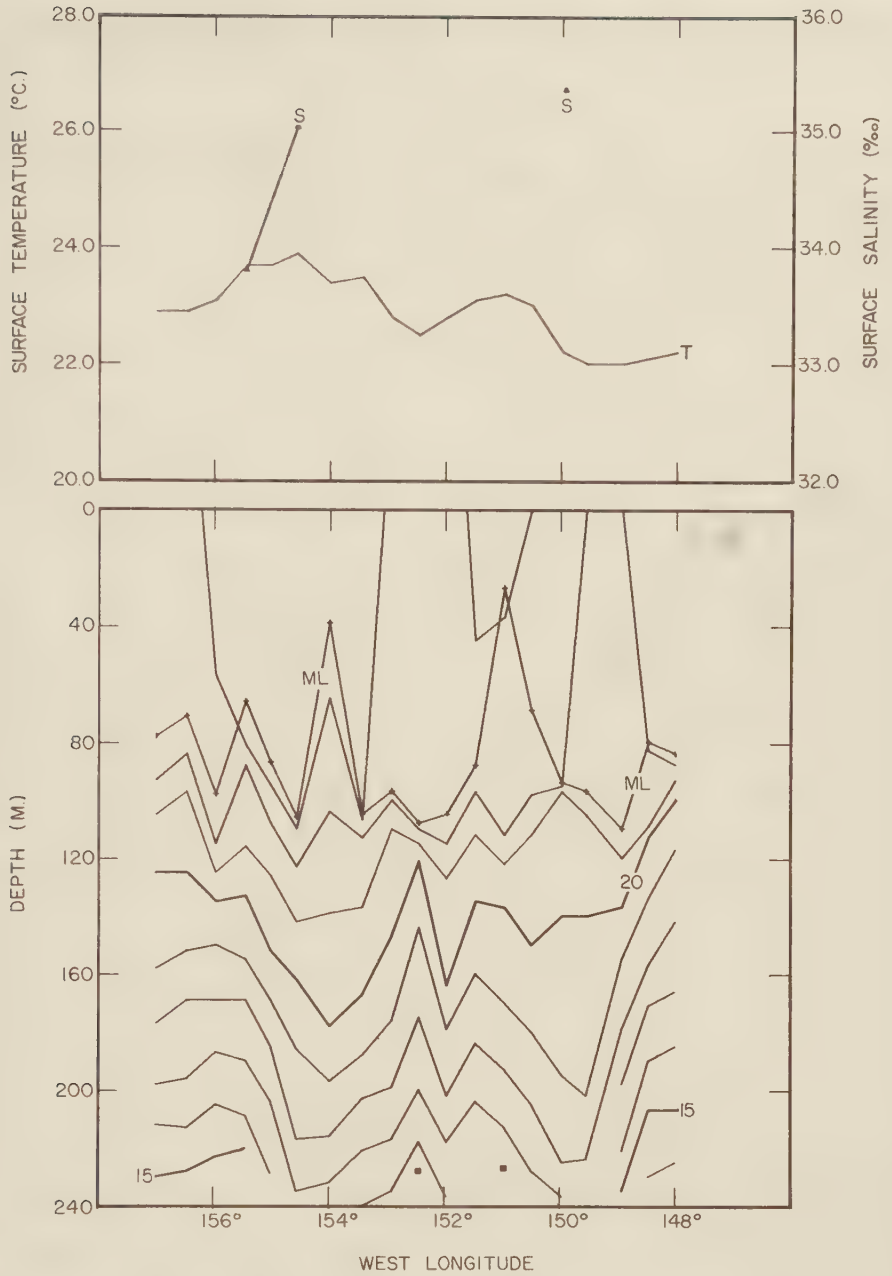


Figure 19.--Surface temperatures (° C.) and salinities (°/oo) (upper panel) and zonal BT temperature (° C.) section (lower panel) for Townsend Cromwell cruise 10 between stations 37 and 40. The bottom of the ML (mixed layer) is shown by the starred line in the lower panel.

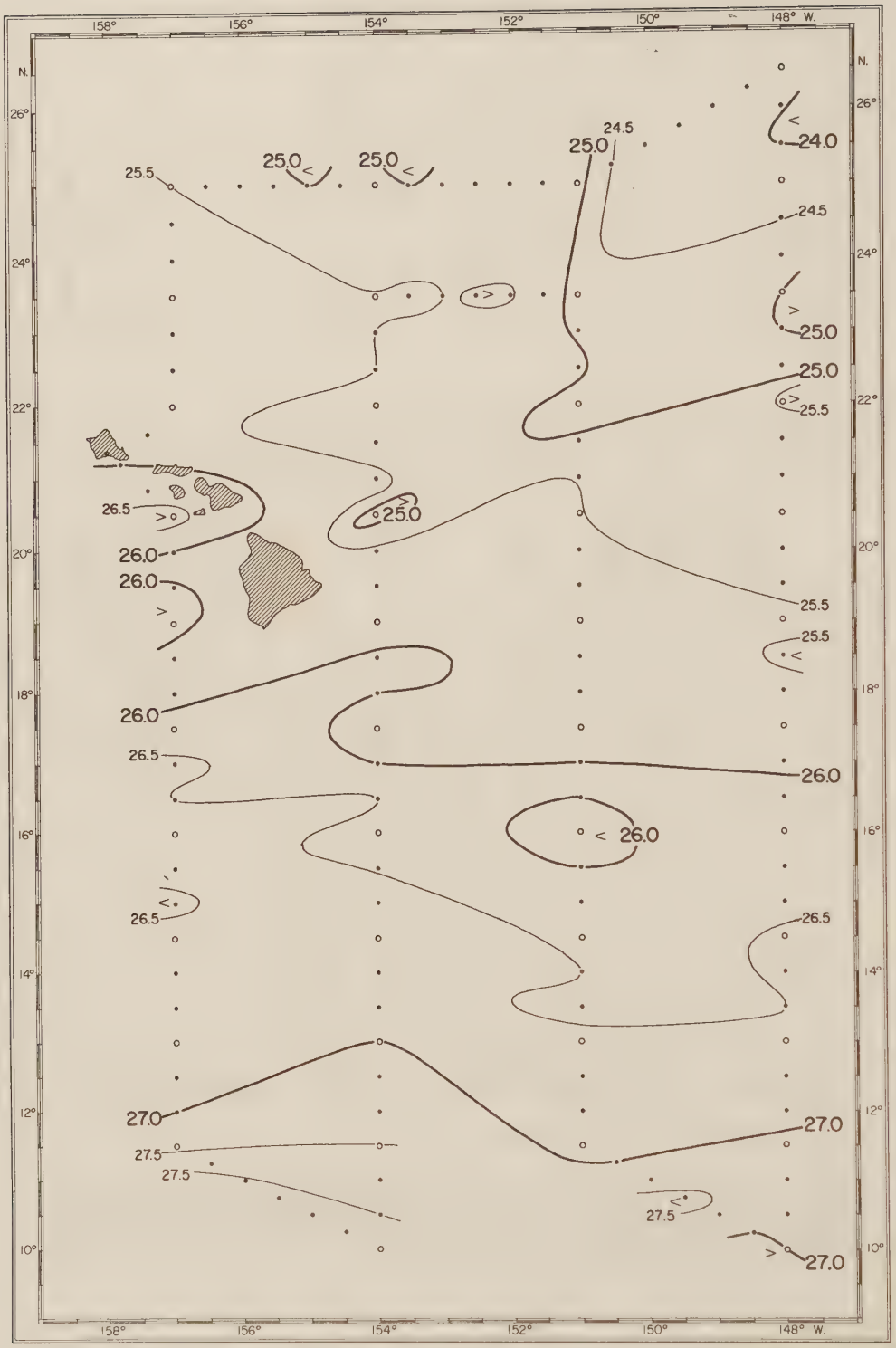


Figure 20.--Surface temperature distribution (° C.) based on bucket temperature at each BT cast for Townsend Cromwell cruise 8.

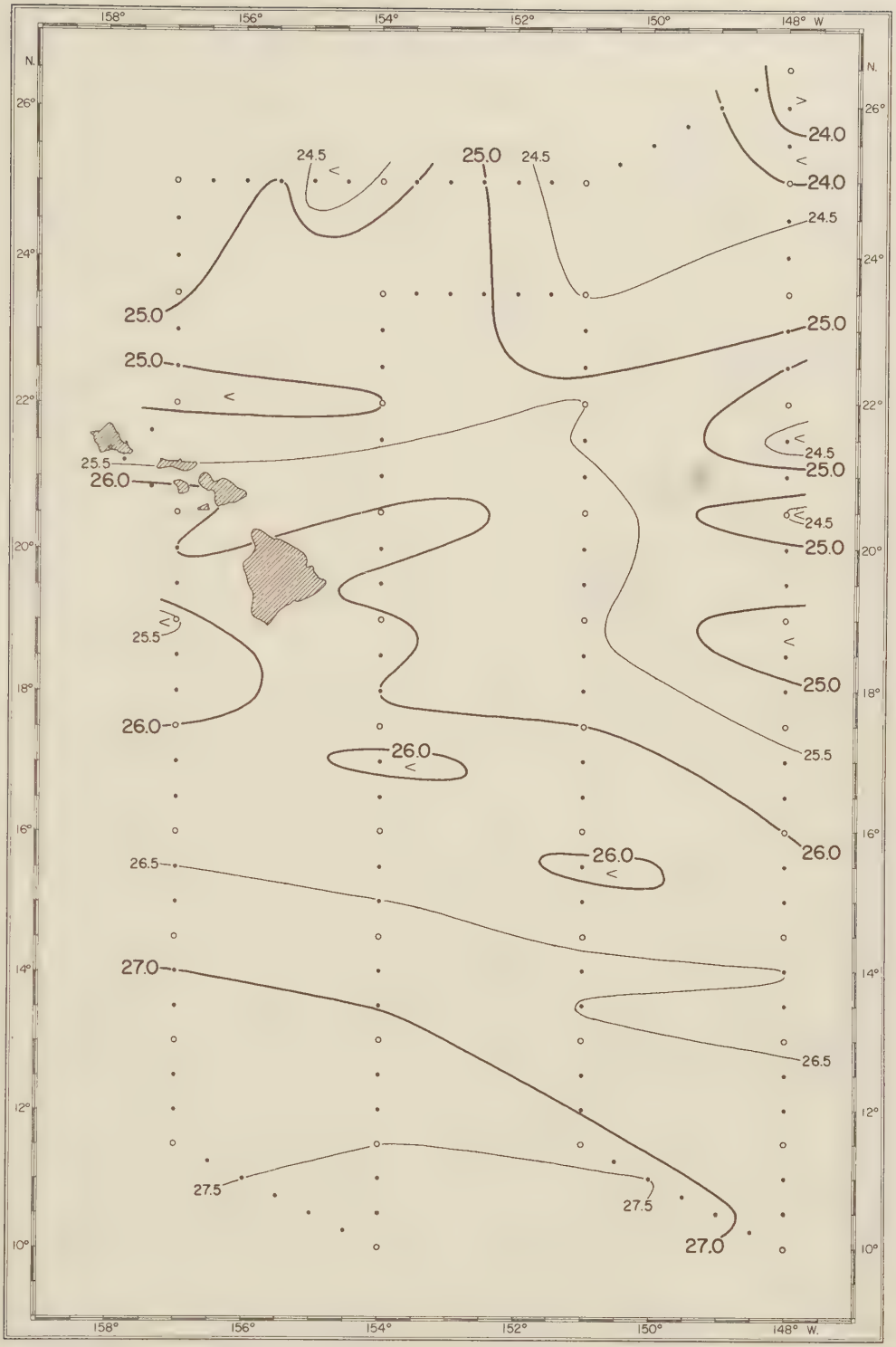


Figure 21.--Surface temperature distribution (° C.) based on bucket temperature at each BT cast for Townsend Cromwell cruise 9.

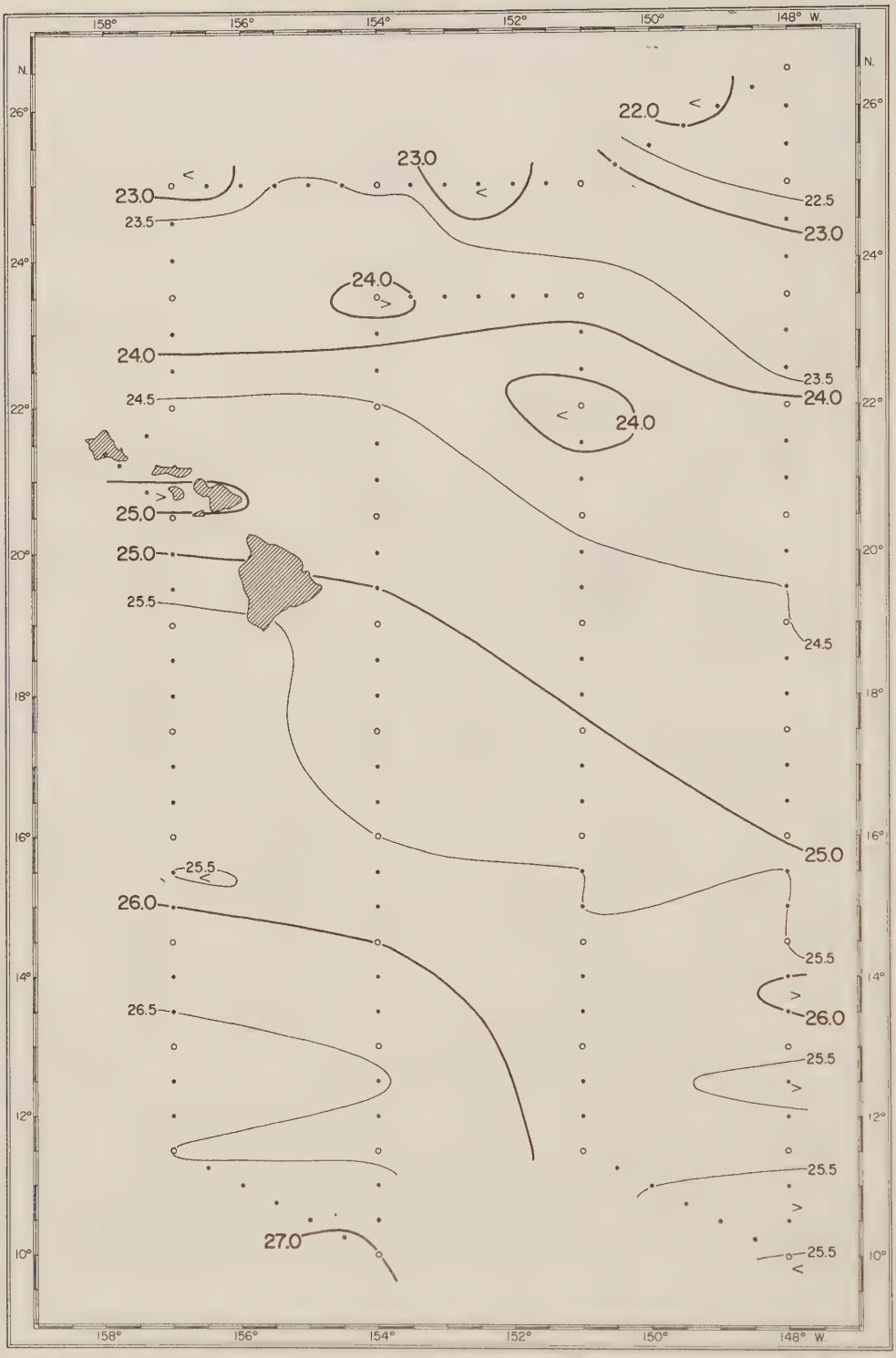


Figure 22.--Surface temperature distribution (° C.) based on bucket temperature at each BT cast for Townsend Cromwell cruise 10.

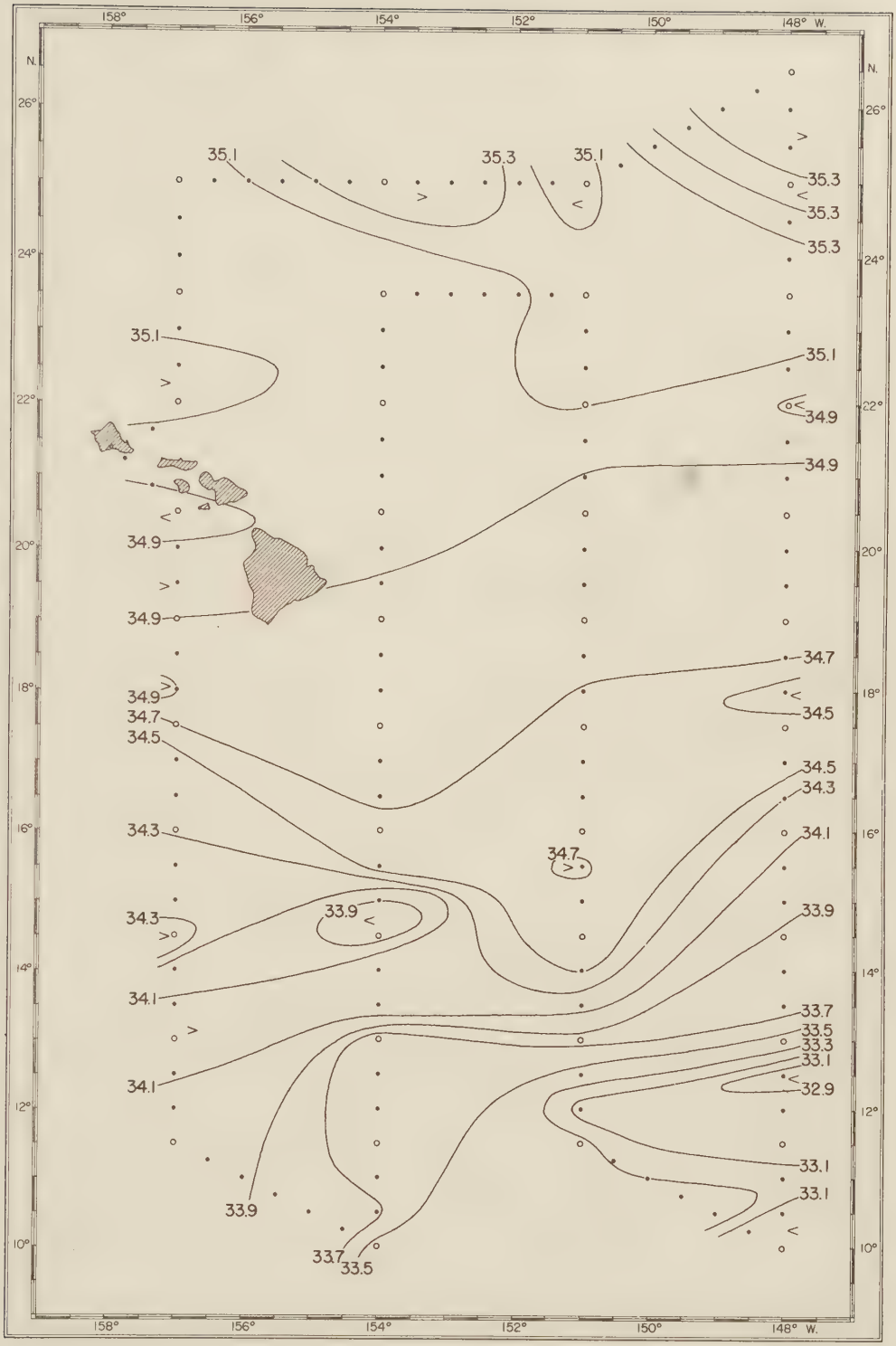


Figure 23.--Surface salinity distribution (°/oo) from bucket salinity samples at each BT cast for Townsend Cromwell cruise 8.

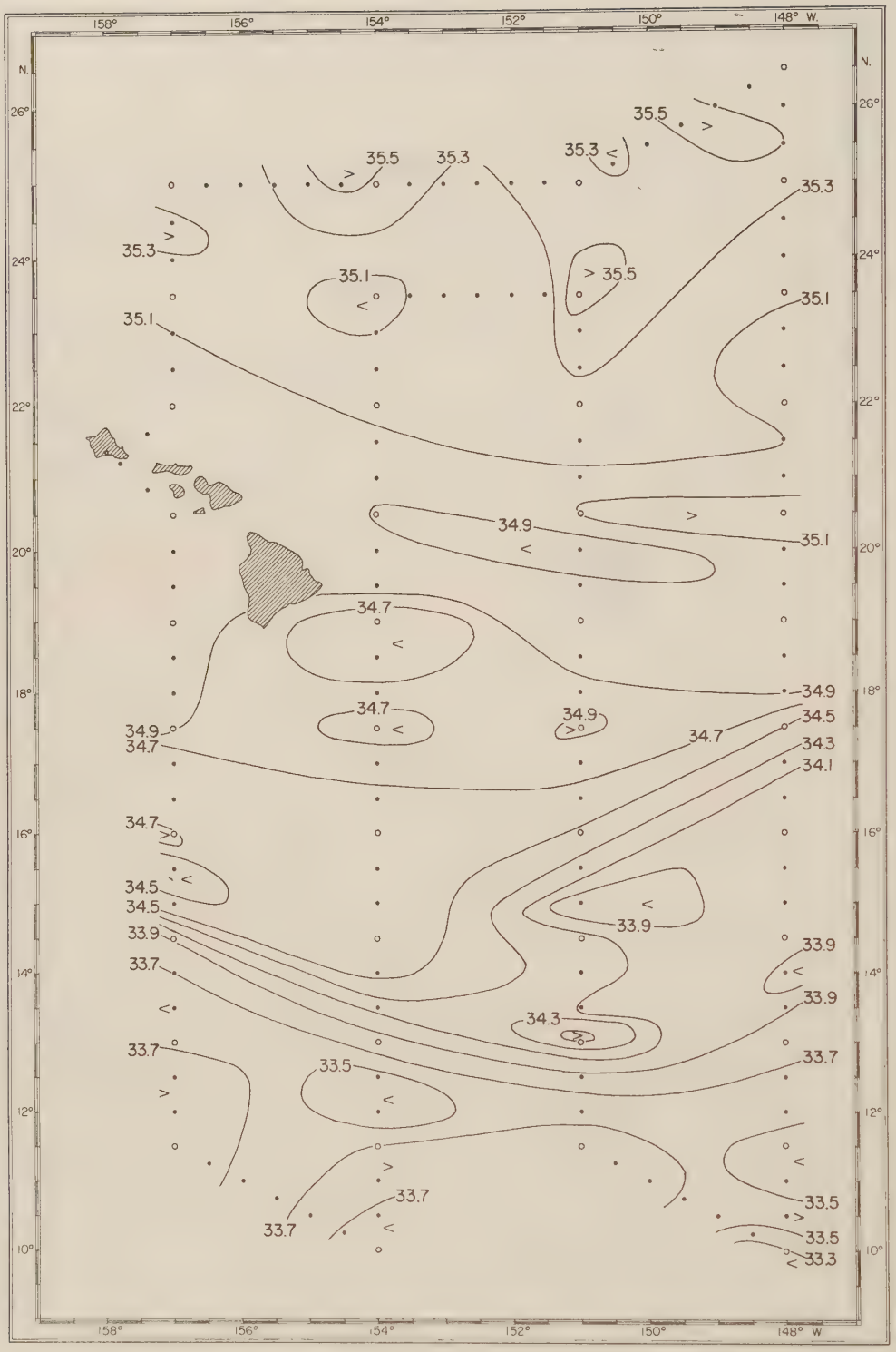


Figure 24.--Surface salinity distribution (°/oo) from bucket salinity samples at each BT cast for Townsend Cromwell cruise 9.

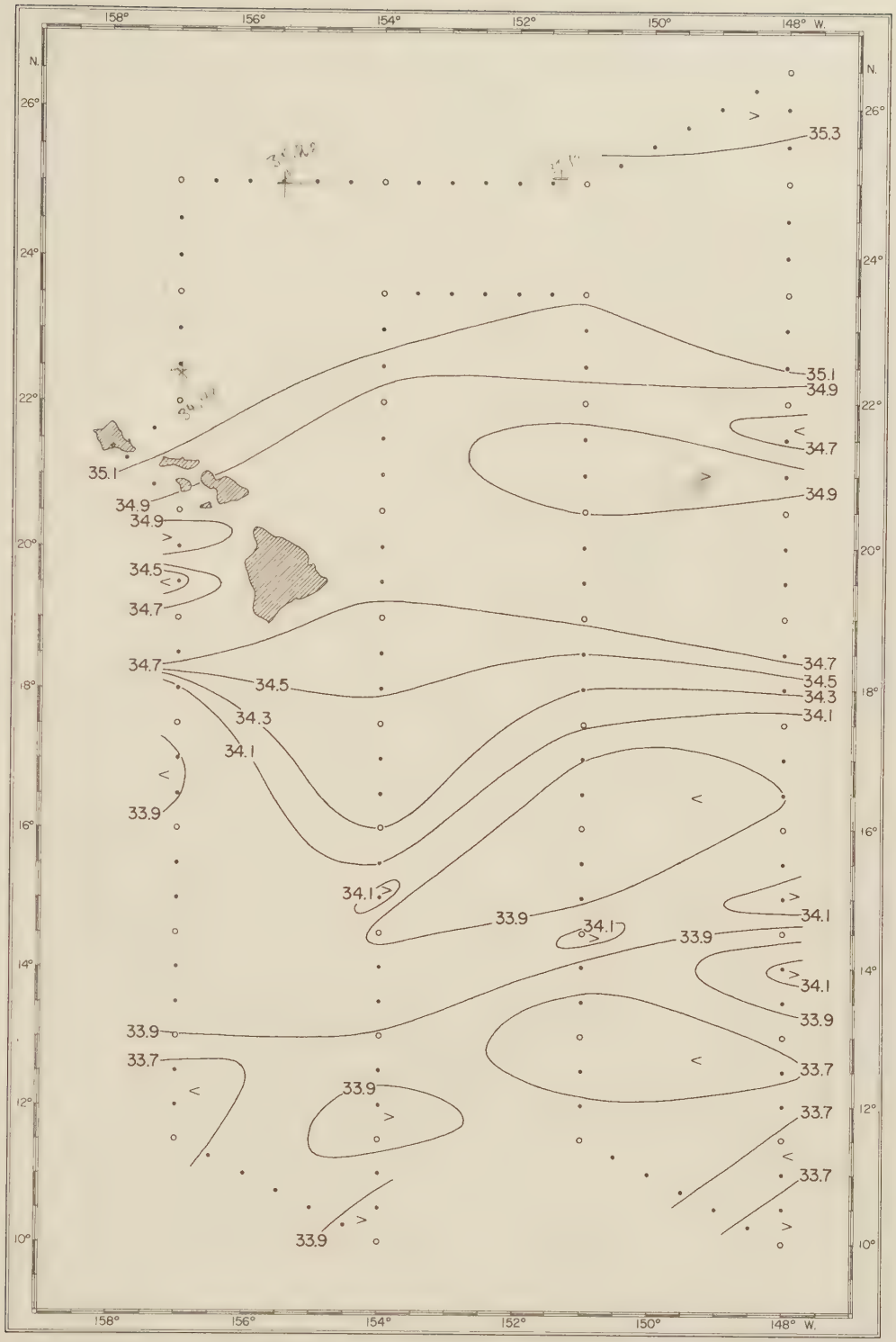
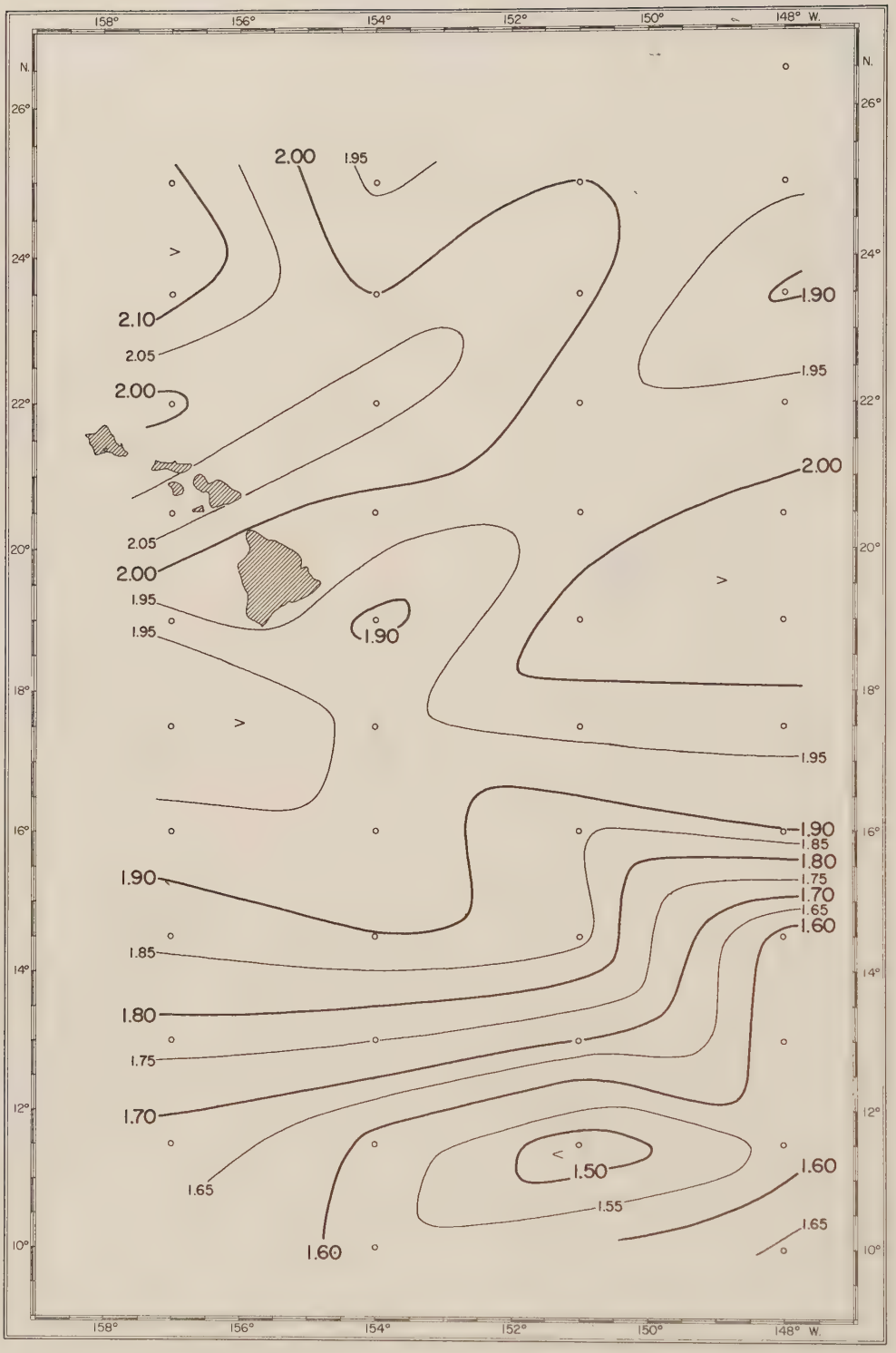


Figure 25.--Surface salinity distribution (°/oo) from bucket salinity samples at each BT cast for Townsend Cromwell cruise 10.



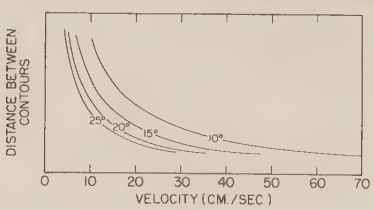
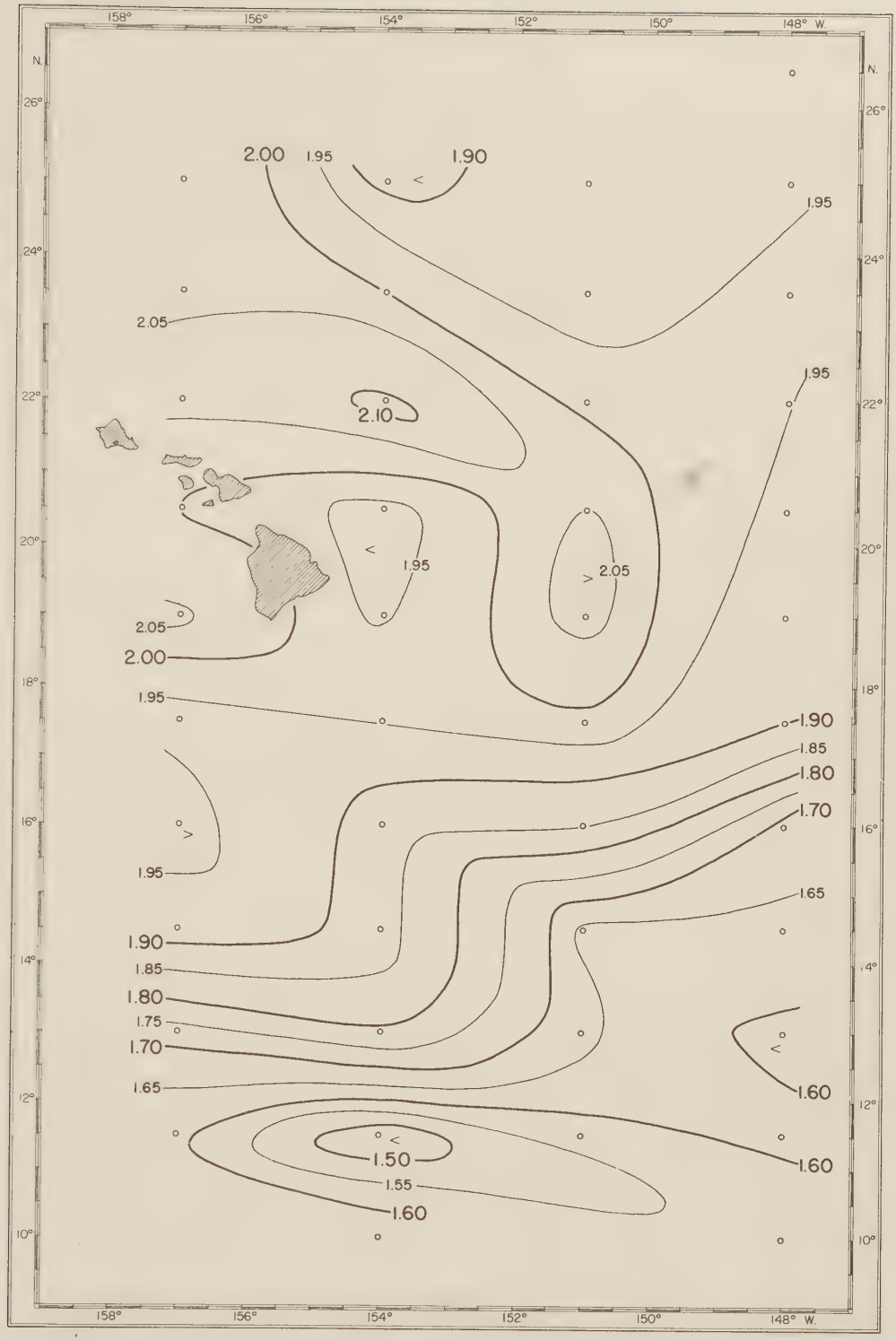


Figure 26.--Dynamic topography (dynamic meters) relative to 1,200 m. for Townsend Cromwell cruise 8.



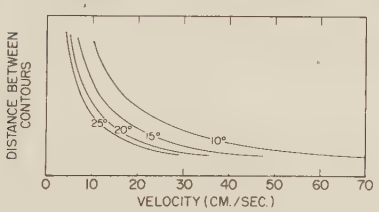
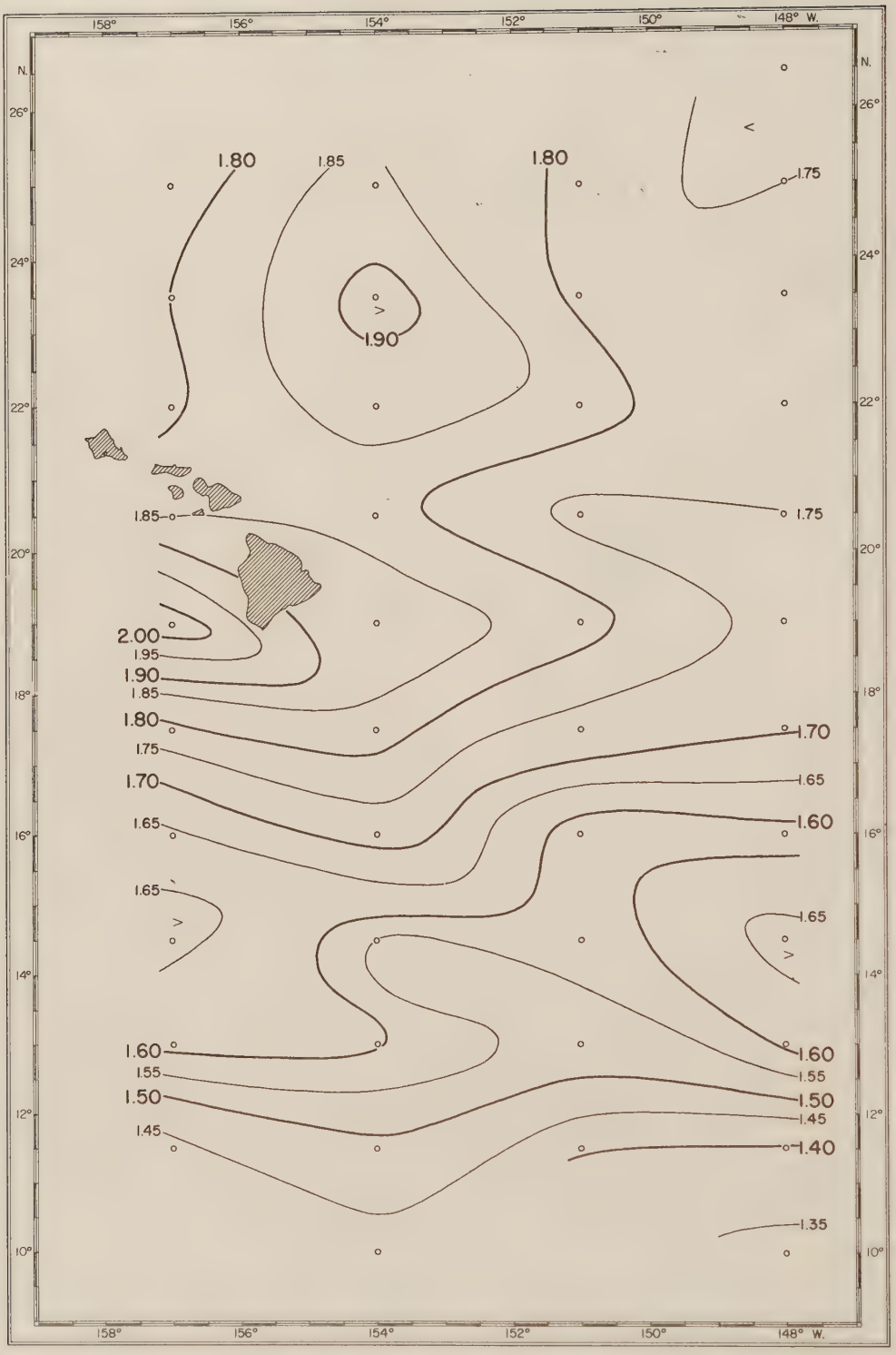


Figure 27.--Dynamic topography (dynamic meters) relative to 1,200 m. for Townsend Cromwell cruise 9.



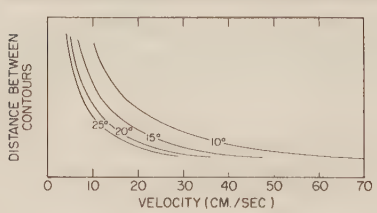


Figure 28.--Dynamic topography (dynamic meters) relative to 1,000 m. for Townsend Cromwell cruise 10.

TABLES

Information printed in the station heading has the following units or coding. Latitude and longitude are in degrees and minutes. Wet and dry bulb temperatures are in degrees Celsius. Wind speed is in knots. Barometric pressure is in tens and units of millibars (initial 9 or 10 omitted). Wind direction, weather, visibility, cloud type, and cloud cover are coded in the manner described by the International Ship Weather Code.

The observed data are presented in the following units: Depth in meters; temperature in degrees Celsius; salinity in grams per kilogram; oxygen in milliliters per liter; and phosphate (PO_4-P) in microgram-atoms per liter.

The derived data are listed with the following units: Density anomaly as sigma-t; specific volume anomaly (delta) in 10^5 cubic centimeters per gram; and dynamic depth anomaly (dyn. dpth.) in dynamic meters.

Table 1.--Original and derived oceanographic data for Townsend Cromwell cruise 8

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 8, STATION 1, 20-34N LAT, 157-16W LONG, SEP. 2, 1964, 0600 G.C.T.
DRY BULB 27.0 WET BULB 21.9 WIND SPEED 12, DIR. 06 BAR. 16 WEATHER 01 VIS. 9 CLOUD TYPE 8, COVER 2

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.84	34.72			22.58	527.6	0.	26.84	34.72	22.58	527.6	0.000
10.	26.84	34.84			22.67	519.4	10.	26.84	34.84	22.67	519.4	0.053
51.	26.14	34.86			22.91	498.5	20.	26.77	34.86	22.71	516.2	0.105
76.	25.16	35.06			23.36	456.2	30.	26.64	34.87	22.76	511.7	0.157
102.	23.60	35.12			23.87	408.3	50.	26.17	34.86	22.90	499.2	0.259
127.	22.44	35.16			24.24	374.4	75.	25.21	35.05	23.34	458.1	0.379
153.	20.59	35.04			24.65	335.1	100.	23.72	35.12	23.83	411.8	0.489
178.	18.98	34.92			24.98	304.3	150.	20.82	35.06	24.61	339.5	0.678
193.	18.12*	34.86			25.15	288.5	200.	17.73	34.82	25.22	282.5	0.835
226.	16.36	34.66			25.42	263.5	250.	15.19	34.54	25.59	247.5	0.968
254.	14.97	34.52			25.63	244.4	300.	12.00	34.27	26.04	205.1	1.082
279.	12.96	34.34			25.91	217.5	400.	8.51	34.15	26.55	156.5	1.265
304.	11.86	34.26			26.06	203.2	500.	6.74	34.02	26.71	141.7	1.415
405.	8.38	34.15			26.57	154.7	600.	5.68	34.14	26.93	120.6	1.548
506.	6.67	34.02			26.71	141.1	700.	5.13	34.30	27.13	102.3	1.660
607.	5.63	34.15			26.95	119.0	800.	4.82	34.45	27.28	88.7	1.757
808.	4.80	34.46			27.29	87.8	1000.	4.15	34.52	27.41	77.2	1.925
1009.	4.12	34.52			27.41	76.9	1200.	3.53	34.56	27.50	68.5	2.072
1209.	3.50	34.56			27.51	68.2	1500.	2.88	34.59	27.59	60.5	2.269
1511.	2.86	34.59			27.59	60.3						

CROMWELL 8, STATION 2, 19- 3N LAT, 156-58W LONG, SEP. 2, 1964, 1700 G.C.T.
DRY BULB 26.0 WET BULB 22.3 WIND SPEED 14, DIR. 07 BAR. 14 WEATHER 03 VIS. 6 CLOUD TYPE 8, COVER 4

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.16	34.88			22.91	495.6	0.	26.16	34.88	22.91	495.6	0.000
10.Δ	26.14	34.88			22.92	495.4	10.	26.14	34.88	22.92	495.4	0.050
20.Δ	26.12	34.90			22.94	493.8	20.	26.12	34.90	22.94	493.8	0.100
30.	26.09	34.92			22.97	491.8	30.	26.09	34.92	22.97	491.8	0.149
51.	24.43	34.92			23.47	444.2	50.	24.53	34.92	23.44	447.0	0.244
77.	23.04	35.04			23.97	397.5	75.	23.12	35.03	23.94	400.5	0.351
101.	22.27	35.09			24.23	373.8	100.	22.30	35.09	24.22	374.8	0.448
126.	20.85	35.14			24.66	333.6	150.	19.93	35.05	24.84	317.3	0.623
176.	18.92	34.90			24.98	304.2	200.	17.43	34.77	25.25	279.2	0.773
192.	18.04	34.83			25.15	288.7	250.	13.87	34.38	25.75	232.0	0.902
225.	15.43	34.55			25.55	251.1	300.	11.31	34.22	26.13	195.9	1.010
253.	13.70	34.36			25.77	229.9	400.	7.87	34.16	26.65	146.3	1.182
279.	12.19	34.25			25.99	209.4	500.	6.29	34.29	26.98	115.8	1.315
303.	11.20	34.22			26.15	194.1	600.	5.64	34.36	27.11	103.7	1.426
403.	7.79	34.16			26.67	145.1	700.	5.19	34.40	27.20	95.8	1.526
505.	6.25	34.30			26.99	114.7	800.	4.83	34.44	27.27	89.7	1.620
606.	5.62	34.36			27.12	103.3	1000.	4.30	34.52	27.39	79.3	1.791
806.	4.81	34.44			27.27	89.4	1200.	3.67	34.57	27.50	69.5	1.942
1006.	4.29	34.52			27.40	79.0	1500.	2.87	34.58	27.58	61.0	2.140
1206.	3.65	34.57*			27.50	69.2						
1506.	2.85	34.58			27.59	60.9						

TEMPERATURE ERROR TERM AT 150. METERS IS 0.10

CROMWELL 8, STATION 3, 17-30N LAT, 157- 1W LONG, SEP. 3, 1964, 0400 G.C.T.
DRY BULB 26.2 WET BULB 22.9 WIND SPEED 24, DIR. 06 BAR. 13 WEATHER 01 VIS. 9 CLOUD TYPE 8, COVER 1

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.43	34.68			22.68	518.1	0.	26.43	34.68	22.68	518.1	0.000
10.Δ	26.45	34.68			22.67	519.1	10.	26.45	34.68	22.67	519.1	0.052
30.Δ	26.44	34.68			22.68	519.6	20.	26.47	34.67	22.66	520.7	0.105
50.	26.11	34.81			22.88	501.2	30.	26.44	34.68	22.68	519.6	0.157
76.	23.89	34.86			23.59	434.1	50.	26.11	34.81	22.88	501.2	0.260
101.	22.89	35.14			24.09	387.1	75.	23.98	34.86	23.56	436.9	0.378
126.	22.53	35.16			24.21	376.8	100.	22.91	35.13	24.08	388.5	0.482
151.	20.89	34.98			24.53	347.1	150.	20.96	34.99	24.51	348.5	0.668
176.	19.89	35.06			24.86	316.7	200.	17.66	34.76	25.19	285.2	0.827
192.	18.68	34.88			25.03	300.4	250.	12.33	34.28	25.98	209.5	0.952
225.	14.37	34.42			25.68	238.3	300.	10.42	34.24	26.30	179.4	1.050
252.	12.21	34.27			26.00	207.7	400.	8.35	34.34	26.72	140.5	1.211
278.	11.06	34.22			26.18	191.1	500.	7.97	34.42	26.84	130.5	1.348
303.	10.35	34.24			26.32	177.9	600.	6.34	34.44	27.09	106.9	1.468
404.	8.30	34.34			26.73	139.5	700.	5.46	34.46	27.21	95.1	1.570
505.	7.96*	34.42			26.85	130.2	800.	5.07	34.48	27.28	89.8	1.664
606.	6.23	34.44			27.10	105.5	1000.	4.41	34.52	27.38	80.5	1.836
807.	5.06	34.48			27.28	89.6	1200.	3.76	34.54	27.47	72.8	1.991
1007.	4.39	34.52			27.38	80.3	1500.	3.01	34.58	27.57	62.9	2.198
1207.	3.74	34.54			27.47	72.5						
1505.	3.00	34.58			27.57	62.7						

TEMPERATURE ERROR TERM AT 200. METERS IS 0.13
TEMPERATURE ERROR TERM AT 700. METERS IS 0.10

ΔFROM BT DATA
*INTERPOLATED DATA

Table 1.--Continued

CROMWELL 8, STATION 4, 16- 2N LAT, 157- 1W LONG, SEP. 3, 1964, 1400 G.C.T.
DRY BULB 23.0 WET BULB 26.2 WIND SPEED 22, DIR. 06 BAR. 13 WEATHER 02 VIS. 4 CLOUD TYPE 8, COVER 2

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.74	34.30			22.30	554.8	0.	26.74	34.30	22.30	554.8	0.000
10.	26.77	34.30			22.29	556.1	10.	26.77	34.30	22.29	556.1	0.056
20.Δ	26.73	34.34			22.33	552.4	20.	26.73	34.34	22.33	552.4	0.112
30.Δ	26.50	34.44			22.48	538.7	30.	26.50	34.44	22.48	538.7	0.167
50.Δ	26.50	34.62			22.61	526.5	50.	26.50	34.62	22.61	526.5	0.274
76.	26.32	34.81			22.81	508.5	75.	26.36	34.81	22.80	509.9	0.405
101.	23.12	34.72			23.71	423.7	100.	23.29	34.72	23.66	428.0	0.523
125.	18.88	34.76			24.89	311.7	150.	16.11	34.55	25.40	263.6	0.697
151.	16.02	34.54			25.41	262.4	200.	11.83	34.22	26.04	203.0	0.815
176.	13.18	34.26			25.80	224.9	250.	10.89	34.43	26.37	172.2	0.909
192.	12.19	34.22			25.97	209.5	300.	10.45	34.57	26.56	155.5	0.992
224.	11.12	34.28			26.21	186.5	400.	9.22	34.60	26.79	134.3	1.138
252.	10.89	34.44			26.38	171.4	500.	8.19	34.56	26.92	123.1	1.268
288.	10.73	34.52			26.47	163.5	600.	7.12	34.50	27.03	113.2	1.387
303.	10.38	34.58			26.58	153.4	700.	6.27	34.49	27.14	103.3	1.497
403.	9.20	34.60			26.79	134.4	800.	5.60	34.51	27.24	94.4	1.597
505.	8.14	34.56			26.93	122.6	1000.	4.62	34.52	27.36	82.9	1.776
605.	7.07	34.50			27.04	112.8	1200.	3.85	34.55	27.46	73.3	1.934
805.	5.57	34.51			27.24	94.0						
983.	4.69	34.52			27.35	83.8						
1117.	4.15	34.54			27.43	76.8						
1305.	3.52	34.56			27.51	69.1						

CROMWELL 8, STATION 5, 14-30N LAT, 157- 1W LONG, SEP. 3, 1964, 2400 G.C.T.
DRY BULB 26.2 WET BULB 24.7 WIND SPEED 16, DIR. 14 BAR. 12 WEATHER 51 VIS. 4 CLOUD TYPE 0, COVER 8

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.76	34.40			22.36	548.2	0.	26.76	34.40	22.36	548.2	0.000
10.Δ	26.72	34.31			22.31	553.9	10.	26.72	34.31	22.31	553.9	0.056
30.Δ	26.68	34.36			22.36	549.9	20.	26.70	34.32	22.32	553.2	0.111
50.Δ	26.60	34.40			22.41	545.4	30.	26.68	34.36	22.36	549.9	0.167
72.	24.81	34.61			23.13	478.2	50.	26.60	34.40	22.41	545.4	0.277
96.	22.23	34.85			24.06	389.9	75.	24.49	34.64	23.25	466.7	0.405
120.	20.36	34.98			24.67	332.4	100.	21.91	34.89	24.18	378.8	0.511
144.	18.05	34.82			25.14	288.1	150.	17.68	34.77	25.19	283.3	0.678
167.	16.33	34.59			25.38	266.1	200.	12.75	34.28	25.91	215.6	0.804
181.	14.24	34.40			25.69	235.9	250.	10.17	34.35	26.43	165.8	0.900
212.	12.14	34.26			26.01	206.1	300.	9.84	34.53	26.63	148.2	0.979
237.	10.42	34.25			26.31	176.9	400.	8.37	34.54	26.88	125.3	1.117
260.	10.13	34.43			26.50	159.3	500.	7.30	34.51	27.02	113.4	1.237
283.	10.04	34.50			26.57	153.1	600.	6.48	34.51	27.12	104.0	1.347
375.	8.68	34.55			26.84	129.3	700.	5.84	34.51	27.20	96.5	1.448
467.	7.62	34.52			26.97	117.1	800.	5.33	34.52	27.28	90.0	1.543
553.	6.84	34.51			27.08	108.0	1000.	4.56	34.56	27.39	79.7	1.714
743.	5.61	34.51			27.24	93.8	1200.	3.83	34.57	27.49	71.1	1.867
928.	4.81	34.55			27.36	82.6						
1112.	4.18	34.56			27.44	75.7						
1334.	3.36	34.58			27.54	65.9						

TEMPERATURE ERROR TERM AT 200. METERS IS 0.14

CROMWELL 8, STATION 6, 13- 1N LAT, 157- 4W LONG, SEP. 4, 1964, 1200 G.C.T.
DRY BULB 26.0 WET BULB 24.5 WIND SPEED 18, DIR. 20 BAR. 12 WEATHER 01 VIS. 8 CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.93	34.18			22.14	569.2	0.	26.93	34.18	22.14	569.2	0.000
11.	26.96	34.19			22.14	569.8	10.	26.96	34.19	22.14	570.2	0.057
31.	26.84	34.46			22.38	547.6	20.	26.93	34.28	22.22	562.5	0.114
50.	26.56	34.82			22.74	514.0	30.	26.85	34.44	22.37	549.2	0.170
77.	22.92	35.02			23.99	395.6	50.	26.56	34.82	22.74	514.0	0.278
102.	21.39	35.04			24.44	354.0	75.	23.22	35.01	23.90	404.2	0.393
127.	19.04	34.91			24.96	304.7	100.	21.49	35.04	24.41	356.4	0.489
153.	16.80	34.65			25.31	271.8	150.	17.08	34.68	25.27	275.6	0.648
192.	11.52	34.24			26.11	195.8	200.	11.03	34.24	26.19	187.7	0.765
226.	10.24	34.31			26.39	169.2	250.	9.98	34.41	26.51	158.1	0.852
253.	9.96	34.42			26.53	157.0	300.	9.12	34.44	26.68	142.6	0.928
279.	9.59	34.46			26.62	148.5	400.	8.03	34.52	26.91	122.4	1.062
304.	9.03	34.44			26.70	141.5	500.	7.00	34.52	27.06	108.6	1.178
404.	8.01	34.52			26.92	121.8	600.	6.16	34.50	27.16	100.0	1.284
506.	6.94*	34.52			27.07	107.9	700.	5.55	34.51	27.25	92.3	1.381
606.	6.12	34.50			27.16	99.6	800.	5.06	34.54	27.32	85.3	1.471
808.	5.03	34.54			27.33	84.8	1000.	4.21	34.56	27.44	75.1	1.633
1008.	4.18	34.56			27.44	74.7	1200.	3.53	34.58	27.52	67.1	1.777
1208.	3.51	34.58			27.52	66.8	1500.	2.81	34.62	27.62	57.6	1.966
1508.	2.80	34.62			27.62	57.4						

ΔFROM BT DATA
*INTERPOLATED DATA

Table 1.--Continued

CROMWELL 8, STATION 7, 11-30N LAT, 157- CW LONG, SEP. 4, 1964, 2300 G.C.T.
DRY BULB 28.4 WET BULB 24.5 WIND SPEED 08, DIR. 18 BAR. 14 WEATHER 02 VIS. 8 CLOUD TYPE 2, COVER 6

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA				
DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	27.32	33.93			21.83	599.1	0.	27.32	33.93	21.83	599.1	0.000
9.	27.10	33.99			21.95	588.4	10.	27.10	33.99	21.95	588.1	0.060
30.Δ	26.28	34.17			22.34	551.5	20.	26.88	34.06	22.07	577.0	0.118
45.	23.94	34.50			23.30	460.3	30.	26.28	34.17	22.34	551.5	0.175
71.	20.64	34.88			24.52	345.0	50.	23.34	34.62	23.56	435.5	0.275
93.	16.33	34.54			25.34	267.5	75.	19.86	34.83	24.69	328.7	0.371
116.	13.22	34.37			25.88	216.1	100.	15.22	34.47	25.54	248.6	0.444
140.	11.72	34.28			26.10	195.2	150.	11.56	34.38	26.21	185.1	0.553
163.	11.47	34.53			26.34	172.9	200.	10.68	34.64	26.58	151.5	0.638
176.	11.16	34.57			26.43	164.8	250.	10.00	34.68	26.72	138.3	0.711
207.	10.56	34.66			26.61	148.5	300.	9.46	34.65	26.79	133.1	0.779
232.	10.26	34.68			26.68	142.5	400.	8.51	34.62	26.91	122.3	0.908
254.	9.94	34.68			26.73	137.6	500.	7.56	34.53	26.99	116.3	1.029
277.	9.70	34.66			26.78	135.6	600.	6.64	34.45	27.06	110.0	1.143
367.	8.78	34.62			26.88	125.6	700.	6.05	34.51	27.18	99.2	1.249
459.	8.01	34.59			26.97	117.6	800.	5.50	34.54	27.28	90.6	1.344
549.	7.02	34.45			27.00	114.9	1000.	4.51	34.55	27.39	79.6	1.517
732.	5.90	34.54			27.22	95.3	1200.	3.75	34.57	27.49	70.5	1.669
915.	4.89	34.54			27.35	84.2						
1103.	4.10	34.56			27.45	74.6						
1394.	3.24	34.60			27.57	63.4						

TEMPERATURE ERROR TERM AT 200. METERS IS 0.10

CROMWELL 8, STATION 7A, 9-59N LAT, 153-59W LONG, SEP. 5, 1964, 1800 G.C.T.
DRY BULB 25.9 WET BULB 23.6 WIND SPEED 06, DIR. 14 BAR. 13 WEATHER 02 VIS. 9 CLOUD TYPE 8, COVER 4

DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	27.19	33.52	4.40	0.87	21.57	624.6	0.	27.19	33.52	21.57	624.6	0.000
10.Δ	27.36	33.78	4.28		21.71	611.5	10.	27.36	33.78	21.71	611.5	0.062
20.Δ	27.20	33.85			21.81	602.0	20.	27.20	33.85	21.81	602.0	0.123
30.Δ	27.08	33.88			21.87	596.6	30.	27.08	33.88	21.87	596.6	0.184
50.	21.05	34.54	4.33	0.54	24.15	379.4	50.	21.05	34.54	24.15	379.4	0.282
76.	14.76	34.44	3.42	1.07	25.61	240.7	75.	14.95	34.45	25.58	243.7	0.361
101.	12.37	34.44	1.45	2.19	26.10	194.4	100.	12.42	34.44	26.09	195.5	0.416
125.	11.59	34.70	0.27	2.59	26.45	161.7	150.	11.06	34.70	26.55	152.6	0.504
151.	11.04	34.70	0.23	2.65	26.55	152.5	200.	10.37	34.71	26.68	141.3	0.578
175.	10.66	34.70	0.20	2.61	26.62	146.5	250.	9.93	34.70	26.75	135.8	0.647
190.	10.47	34.71	0.17	2.79	26.66	142.9	300.	9.53	34.70	26.82	130.3	0.715
224.	10.17	34.71	0.20	2.26	26.72	138.6	400.	8.54	34.63	26.92	121.7	0.842
251.	9.92	34.70	0.31	2.52	26.75	135.7	500.	7.57	34.59	27.04	111.7	0.960
276.	9.68	34.68	0.32	2.42	26.78	133.8	600.	6.64	34.55	27.14	102.8	1.068
300.	9.53	34.70	0.39	2.73	26.82	130.3	700.	5.91	34.54	27.22	94.9	1.168
400.	8.54	34.63	0.37	3.04	26.92	121.7	800.	5.33	34.55	27.30	87.9	1.260
502.	7.55	34.59	0.35	2.46	27.04	111.5	1000.	4.41	34.57	27.42	76.8	1.427
603.	6.61	34.55	0.56	2.66	27.14	102.5	1200.	3.73	34.59	27.51	68.7	1.574
802.	5.32	34.55	0.62	2.97	27.30	87.7						
1001.	4.41	34.57	0.94	2.76	27.42	76.8						
1200.	3.73	34.59	1.34	3.32	27.51	68.7						
1499.	2.99	34.62	1.65	2.96	27.60	59.6						

CROMWELL 8, STATION 8, 11-35N LAT, 154- CW LONG, SEP. 6, 1964, 0300 G.C.T.
DRY BULB 27.2 WET BULB 23.8 WIND SPEED 10, DIR. 03 BAR. 12 WEATHER 02 VIS. 9 CLOUD TYPE 8, COVER 4

DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.Δ	27.48	33.66			21.58	623.5	0.	27.48	33.66	21.58	623.5	0.000
10.Δ	27.14	33.69	4.33	0.31	21.71	611.3	10.	27.14	33.69	21.71	611.3	0.062
20.Δ	26.92	33.75			21.82	600.6	20.	26.92	33.75	21.82	600.6	0.123
30.	26.74	33.77			21.90	594.1	30.	26.74	33.77	21.90	594.1	0.183
51.	25.18	34.47	4.57	0.40	22.91	498.2	50.	25.36	34.43	22.83	505.9	0.294
67.	19.00	34.56	4.09	1.12	24.70	327.1	75.	17.17	34.57	25.17	283.3	0.394
77.	16.78	34.57	3.65	0.84	25.26	274.8	100.	12.63	34.31	25.95	208.8	0.456
92.	13.68	34.37	2.27	1.63	25.75	224.4	150.	11.31	34.65	26.46	161.1	0.549
102.	12.42	34.30	2.32	1.78	25.98	205.6	200.	10.62	34.71	26.63	146.1	0.626
117.	11.32	34.28	2.56	1.79	26.18	187.6	250.	9.81	34.65	26.73	137.2	0.698
127.	11.02	34.30	2.24	2.16	26.25	181.1	300.	9.09	34.62	26.82	129.3	0.765
153.	11.38	34.70	0.19	2.43	26.49	158.6	400.	8.02	34.56	26.95	118.6	0.890
192.	10.76	34.71	0.22	2.67	26.61	147.9	500.	6.83	34.52	27.09	106.1	1.003
253.	9.76	34.65	0.25	2.72	26.74	136.8	600.	6.03	34.52	27.19	96.8	1.106
278.	9.40	34.62	0.31	2.34	26.78	133.7	700.	5.38	34.53	27.28	88.7	1.200
304.	9.04	34.62	0.28	2.47	26.83	128.4	800.	4.85	34.55	27.36	81.8	1.286
405.	7.97	34.56	0.34	2.64	26.95	118.3	1000.	4.11	34.57	27.45	73.1	1.442
506.	6.76	34.52	0.39	2.87	27.09	105.4	1200.	3.42	34.59	27.54	64.8	1.582
606.	5.99	34.52	0.47	3.01	27.20	96.3						
808.	4.81	34.55	0.77	2.88	27.36	81.3						
1009.	4.08	34.57	1.07	3.06	27.46	72.8						
1174.	3.45	34.59	1.39	3.15	27.54	65.1						
1421.	2.88	34.62	1.70	2.85	27.61	57.8						

ΔFROM BT DATA

Table 1.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 8, STATION 9, 13- 3N LAT, 154-10W LONG, SEP. 6, 1964, 1200 G.C.T.
DRY BULB 26.3 WET BULB 23.2 WIND SPEED 14, DIR. 05 BAR. 13 WEATHER 02 VIS. 8 CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.Δ	27.15	33.59			21.63	618.4	0.	27.15	33.59	21.63	618.4	0.000
10.Δ	27.15	33.59	4.21	0.45	21.63	618.8	10.	27.15	33.59	21.63	618.8	0.062
30.Δ	26.30	34.03			22.23	562.2	20.	26.86	33.77	21.86	597.1	0.124
52.	24.14	34.50	4.63	0.72	23.24	466.2	30.	26.30	34.03	22.23	562.2	0.182
68.	22.38	34.66	4.92	0.36	23.87	406.6	50.	24.37	34.46	23.15	475.3	0.286
78.	21.68	34.72	4.73	0.44	24.11	383.9	75.	21.88	34.70	24.05	390.4	0.395
92.	20.42	34.83	4.34	0.47	24.54	343.7	100.	19.62	34.81	24.74	325.1	0.486
102.	19.39	34.80	4.21	0.63	24.79	320.4	150.	12.70	34.31	25.93	211.7	0.621
117.	16.74	34.54	3.45	1.76	25.24	277.4	200.	11.09	34.63	26.49	159.4	0.714
127.	15.46	34.44	3.44	1.35	25.46	256.9	250.	10.55	34.68	26.62	148.1	0.792
154.	12.31	34.30	2.06	2.39	26.01	204.9	300.	9.88	34.65	26.72	139.6	0.864
193.	11.19	34.61	0.51	2.69	26.46	162.8	400.	8.65	34.59	26.88	126.1	0.998
254.	10.52	34.67	0.19	2.59	26.62	148.1	500.	7.57	34.54	27.00	115.2	1.120
280.	10.15	34.66	0.14	2.75	26.68	143.1	600.	6.69	34.52	27.11	105.7	1.232
305.	9.81	34.65	0.23	2.74	26.73	138.7	700.	5.97	34.52	27.20	97.0	1.334
405.	8.59	34.59	0.43	3.02	26.88	125.5	800.	5.38	34.54	27.29	89.4	1.429
506.	7.51	34.54	0.49	3.25	27.01	114.7	1000.	4.44	34.56	27.41	77.9	1.598
607.	6.63	34.52	0.47	3.16	27.11	105.1	1200.	3.79	34.58	27.50	70.2	1.748
808.	5.34	34.54	0.65	2.68	27.29	88.8	1500.	3.00	34.60	27.59	61.3	1.948
1009.	4.40	34.56	1.06	2.68	27.42	77.5						
1210.	3.76	34.58	1.40		27.50	69.9						
1510.	2.98	34.60	1.65	2.98	27.59	61.0						

CROMWELL 8, STATION 10, 14-30N LAT, 154- 5W LONG, SEP. 6, 1964, 2000 G.C.T.
DRY BULB 26.7 WET BULB 23.3 WIND SPEED 14, DIR. 06 BAR. 15 WEATHER 02 VIS. 8 CLOUD TYPE 1, COVER 1

DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.80	33.84	4.59	0.28	21.93	589.7	0.	26.80	33.84	21.93	589.7	0.000
10.Δ	26.72	33.83	4.71	0.41	21.95	588.4	10.	26.72	33.83	21.95	588.4	0.059
30.Δ	26.64	33.84			21.98	586.1	20.	26.67	33.83	21.97	587.1	0.119
50.Δ	26.60	33.85			22.00	584.9	30.	26.64	33.84	21.98	586.1	0.178
77.	23.98	34.48	4.87	0.73	23.28	464.1	50.	26.60	33.85	22.00	584.9	0.296
102.	21.43	34.74	4.93	0.39	24.20	376.7	75.	24.23	34.43	23.16	474.8	0.429
127.	20.28	35.02	4.58	0.44	24.72	327.7	100.	21.61	34.72	24.14	382.5	0.537
152.	16.61	34.60	5.04	0.79	25.32	271.2	150.	16.94	34.64	25.27	275.3	0.703
177.	13.60	34.34	2.73	1.69	25.78	227.3	200.	11.95	34.36	26.12	194.7	0.821
192.	12.37	34.32	2.19	2.07	26.01	205.5	250.	10.85	34.58	26.49	160.6	0.911
226.	11.17	34.54	0.79	2.57	26.41	168.3	300.	10.61	34.68	26.62	149.8	0.989
253.	10.84	34.58	0.68	2.75	26.50	160.2	400.	8.85	34.57	26.82	131.4	1.131
279.	10.95	34.68	0.32	2.70	26.55	155.4	500.	7.85	34.56	26.97	118.1	1.257
304.	10.53	34.68	0.23	2.35	26.63	148.7	600.	7.00	34.53	27.07	109.3	1.372
404.	8.79	34.56	0.42	2.52	26.83	130.8	700.	6.21	34.52	27.17	100.3	1.478
506.	7.80*	34.56	0.38	3.00	26.98	117.5	800.	5.53	34.53	27.26	92.0	1.575
606.	6.95	34.53	0.63	3.00	27.08	108.9	1000.	4.61	34.55	27.38	80.8	1.750
808.	5.48	34.53	0.66	3.09	27.27	91.4	1200.	3.90	34.57	27.48	72.3	1.905
1008.	4.58	34.55	0.82	2.75	27.39	80.5	1500.	3.04	34.60	27.58	61.8	2.109
1209.	3.87	34.57	1.21	3.39	27.48	71.9						
1509.	3.02	34.60	1.62	2.83	27.59	61.5						

CROMWELL 8, STATION 11, 16- 0N LAT, 153-58W LONG, SEP. 7, 1964, 0500 G.C.T.
DRY BULB 26.3 WET BULB 23.6 WIND SPEED 16, DIR. 05 BAR. 13 WEATHER 03 VIS. 8 CLOUD TYPE 8, COVER 4

DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.37	34.68	4.52		22.70	516.3	0.	26.37	34.68	22.70	516.3	0.000
9.Δ	26.32	34.68	4.62		22.71	515.2	10.	26.31	34.68	22.72	515.0	0.052
30.Δ	26.20	34.68			22.75	512.4	20.	26.26	34.68	22.73	513.8	0.104
50.Δ	26.06	34.68			22.79	509.0	30.	26.20	34.68	22.75	512.4	0.155
70.	25.12	34.68	4.74	0.39	23.08	482.1	50.	26.06	34.68	22.79	509.0	0.258
92.	22.95	34.77	4.94	0.43	23.79	415.1	75.	24.64	34.69	23.24	467.3	0.381
116.	21.65	34.92	4.80	0.39	24.27	370.1	100.	22.45	34.82	23.97	398.4	0.490
139.	20.41	35.04	4.48		24.70	330.0	150.	19.85	35.03	24.84	317.3	0.671
162.	19.09	34.95	4.29	0.53	24.98	304.3	200.	15.69	34.54	25.49	256.5	0.815
177.	17.66	34.76	4.04	1.36	25.19	284.4	250.	11.98	34.25	26.03	205.2	0.932
208.	15.03	34.48	3.75	0.70	25.58	247.2	300.	9.72	34.21	26.40	169.8	1.026
232.	12.98	34.29	3.61	1.72	25.87	220.3	400.	7.88	34.35	26.80	132.7	1.179
256.	11.70	34.24	3.54	2.96	26.08	200.6	500.	6.87	34.43	27.01	113.1	1.303
279.	10.46	34.20	3.23	1.58	26.27	182.2	600.	6.12	34.47	27.14	101.6	1.411
370.	8.32	34.31	1.39	3.16	26.70	141.4	700.	5.51	34.49	27.23	93.6	1.510
463.	7.20	34.41	0.68	3.22	26.95	119.1	800.	5.05	34.51	27.30	87.4	1.601
554.	6.45	34.46	0.60	2.51	27.09	106.3	1000.	4.36	34.55	27.41	77.6	1.768
740.	5.30	34.49	0.70	3.22	27.26	91.2	1200.	3.75	34.58	27.50	69.9	1.918
925.	4.62	34.54	0.85	3.03	27.38	80.9						
1110.	4.00	34.56	1.13		27.46	73.4						
1394.	3.25	34.59	1.46	3.10	27.56	64.3						

TEMPERATURE ERROR TERM AT 30C. METERS IS 0.10

ΔFROM BT DATA
*INTERPOLATED DATA

Table 1.--Continued

CROMWELL 8, STATION 12, 17-31N LAT, 153-58W LONG, SEP. 7, 1964, 1500 G.C.T.
DRY BULB 27.2 WET BULB 24.0 WIND SPEED 21, DIR. 08 BAR. 14 WEATHER 50 VIS. 6 CLOUD TYPE , COVER

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA				
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.10	34.84	4.06	0.35	22.90	496.7	0.	26.10	34.84	22.90	496.7	0.000
10.Δ	26.09	34.84	4.30	0.37	22.91	496.8	10.	26.09	34.84	22.91	496.8	0.050
30.Δ	26.00	34.84			22.93	494.9	20.	26.06	34.84	22.91	496.4	0.100
50.Δ	25.76	34.85			23.02	487.9	30.	26.00	34.84	22.93	494.9	0.150
76.	23.76	34.91		0.35	23.66	426.9	50.	25.76	34.85	23.02	487.9	0.249
101.	22.74	35.06	4.20	0.23	24.07	388.7	75.	23.85	34.91	23.64	429.5	0.365
126.	21.73	35.08		0.52	24.37	361.0	100.	22.77	35.05	24.06	390.0	0.468
151.	20.53	35.12	4.01	0.30	24.73	327.7	150.	20.58	35.12	24.72	329.1	0.649
176.	18.89	34.96	4.74	0.39	25.04	299.1	200.	17.15	34.75	25.31	273.6	0.801
190.	17.90	34.85		0.48	25.20	283.9	250.	12.24	34.21	25.95	212.6	0.923
224.	15.06	34.50	4.28	0.63	25.59	246.9	300.	9.81	34.15	26.34	175.8	1.021
251.	12.14	34.20	4.40	1.08	25.96	211.5	400.	7.40	34.16	26.72	139.4	1.100
276.	10.73	34.12	4.08	1.55	26.16	192.6	500.	6.80	34.34	26.94	119.5	1.311
302.	9.75	34.15	3.48	1.60	26.35	174.5	600.	5.96	34.42	27.12	103.3	1.424
402.	7.37	34.16	2.01	2.61	26.73	139.0	700.	5.33	34.45	27.22	94.1	1.523
502.	6.80	34.34	0.86	3.10	26.95	119.2	800.	4.86	34.46	27.28	88.5	1.616
602.	5.94	34.42	0.74	3.08	27.12	103.0	1000.	4.23	34.52	27.40	78.2	1.784
803.	4.85	34.46	0.83		27.29	88.4	1200.	3.63	34.55	27.49	70.4	1.935
1002.	4.22	34.52	1.09	2.89	27.40	78.1						
1202.	3.62	34.55	1.25	2.95	27.49	70.3						
1486.	2.88	34.60	1.67	2.63	27.60	59.7						

CROMWELL 8, STATION 13, 19- ON LAT, 153-58W LONG, SEP. 7, 1964, 2400 G.C.T.
DRY BULB 27.0 WET BULB 23.2 WIND SPEED 18, DIR. 06 BAR. 15 WEATHER 01 VIS. 8 CLOUD TYPE 8, COVER 4

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.64	34.83	4.68	0.25	23.04	483.8	0.	25.64	34.83	23.04	483.8	0.000
10.Δ	25.61	34.82	4.63	0.27	23.04	484.0	10.	25.61	34.82	23.04	484.0	0.049
30.Δ	25.54	34.82			23.06	482.7	20.	25.58	34.82	23.05	483.5	0.097
50.Δ	25.48	34.81			23.07	482.5	30.	25.54	34.82	23.06	482.7	0.146
75.	25.00	34.81			23.22	469.5	50.	25.48	34.81	23.07	482.5	0.243
102.	21.89	34.86	4.76	0.90	24.16	380.3	75.	25.00	34.81	23.22	469.5	0.363
126.	20.76	34.98	4.36	0.29	24.56	342.8	100.	22.13	34.85	24.09	387.1	0.471
152.	19.37	34.90	4.27	0.40	24.87	314.4	150.	19.49	34.91	24.85	316.5	0.648
178.	17.30	34.70	3.99	0.94	25.23	280.4	200.	15.75	34.48	25.43	262.1	0.794
192.	16.39	34.56	3.79		25.34	270.4	250.	11.81	34.17	26.00	207.9	0.913
226.	13.57	34.28	3.08		25.74	232.4	300.	9.80	34.18	26.36	173.2	1.009
252.	11.68	34.16	3.72	1.43	26.02	206.0	400.	7.50	34.14	26.70	142.1	1.168
278.	10.32	34.16	3.57	1.74	26.26	182.7	500.	5.71	34.18	26.96	116.8	1.299
303.	9.75	34.18	2.96		26.37	172.3	600.	5.31	34.36	27.15	99.3	1.408
404.	7.41	34.14	2.29	2.52	26.71	141.1	700.	4.99	34.45	27.27	89.5	1.503
504.	5.66	34.18	1.09	3.01	26.97	115.9	800.	4.67	34.49	27.33	84.0	1.591
605.	5.31	34.37	0.66	3.26	27.16	98.6	1000.	4.07	34.51	27.41	77.0	1.754
808.	4.65	34.49	0.80	3.17	27.33	83.7	1200.	3.59	34.54	27.48	70.7	1.903
1008.	4.05	34.51	0.99	3.33	27.41	76.8	1500.	2.82	34.58	27.59	60.6	2.103
1208.	3.57	34.54	1.24	3.19	27.49	70.5						
1508.	2.80	34.58	1.54	2.61	27.59	60.3						

CROMWELL 8, STATION 14, 20-32N LAT, 154- OW LONG, SEP. 8, 1964, 0500 G.C.T.
DRY BULB 25.2 WET BULB 22.6 WIND SPEED 16, DIR. 06 BAR. 17 WEATHER 02 VIS. 7 CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.47	34.57	4.79	0.25	22.89	497.5	0.	25.47	34.57	22.89	497.5	0.000
11.Δ	25.48	34.97	4.90	0.36	23.19	469.4	10.	25.48	34.94	23.17	471.2	0.049
30.Δ	25.42	35.03			23.26	464.1	20.	25.47	35.05	23.25	463.9	0.096
51.	25.04	35.08	4.79	1.13	23.41	450.2	30.	25.42	35.03	23.26	464.1	0.143
77.	23.50	35.08	5.21	0.55	23.87	407.4	50.	25.07	35.08	23.40	451.2	0.235
102.	22.55	35.16	5.08	0.14	24.20	376.4	75.	23.63	35.08	23.83	410.9	0.343
127.	21.34	35.16	4.74	0.60	24.54	345.0	100.	22.62	35.15	24.18	378.7	0.443
153.	20.32	35.11	4.63	0.58	24.78	323.1	150.	20.45	35.12	24.75	325.6	0.620
177.	18.73	34.94	4.49	0.92	25.06	296.7	200.	17.71	34.82	25.22	282.2	0.774
193.	18.08	34.86	4.52	0.44	25.16	287.5	250.	14.18	34.40	25.71	236.3	0.904
226.	16.03	34.62	4.62	0.46	25.47	259.1	300.	11.25	34.16	26.09	199.5	1.014
253.	13.96	34.38	4.66	0.89	25.74	233.7	400.	8.28	34.09	26.54	157.3	1.194
279.	12.58	34.26	4.76	0.95	25.92	216.0	500.	6.23	34.10	26.83	129.3	1.339
304.	11.00	34.14	4.13	1.32	26.13	196.5	600.	5.28	34.21	27.04	110.0	1.460
405.	8.22	34.10	3.15	1.84	26.56	156.0	700.	4.86	34.33	27.19	96.8	1.564
506.	6.13	34.10	1.86	3.37	26.85	127.9	800.	4.64	34.43	27.29	87.7	1.657
606.	5.25	34.22	0.96	3.55	27.05	109.0	1000.	4.07	34.50	27.40	77.7	1.825
808.	4.63	34.44	0.88	3.63	27.30	87.2	1200.	3.52	34.54	27.49	69.5	1.974
1009.	4.04	34.50	1.14		27.41	77.4						
1187.	3.54	34.54	1.45	3.19	27.49	69.9						
1425.	2.99	34.58	1.50	2.99	27.57	62.1						

ΔFROM BT DATA

Table 1.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 8, STATION 15, 22- ON LAT, 153-58W LONG, SEP. 8, 1964, 17CO G.C.T.
DRY BULB 23.8 WET BULB 22.8 WIND SPEED 18, DIR. 08 BAR. 17 WEATHER 01 VIS. 6 CLOUD TYPE 8, COVER 6

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
C.	25.40	34.96	4.73	C.25	23.21	467.4	C.	25.40	34.96	23.21	467.4	0.000
11.Δ	25.43	34.96	4.86	1.55	23.2C	468.7	1C.	25.43	34.96	23.20	468.6	0.047
3C.Δ	25.43	34.97			23.21	468.7	20.	25.43	34.96	23.20	468.8	0.094
50.Δ	25.42	34.97			23.21	469.2	30.	25.43	34.97	23.21	468.7	0.142
75.	24.80	34.99			23.42	450.7	50.	25.42	34.97	23.21	469.2	0.236
97.	23.20	35.08	4.95	0.30	23.9€	399.8	75.	24.80	34.99	23.42	450.7	0.352
121.	22.41	35.15	4.84		24.24	374.0	100.	23.07	35.09	24.00	395.5	0.459
147.	21.79	35.17	4.74	0.31	24.43	356.9	150.	21.69	35.17	24.46	354.1	0.647
172.	20.79	35.16	4.58	0.36	24.69	332.3	200.	19.27	35.02	24.98	305.1	0.814
186.	20.11	35.11	4.51		24.84	319.0	250.	15.52	34.54	25.52	255.0	0.955
219.	17.95	34.85	4.48	0.73	25.19	286.0	300.	12.51	34.26	25.94	215.1	1.073
244.	16.CO	34.58	4.13	1.C5	25.44	261.9	400.	9.39	34.13	26.39	172.0	1.269
269.	14.13	34.42	4.45	1.C9	25.73	234.6	500.	6.97	34.11	26.74	138.5	1.425
294.	12.76	34.28	4.21	1.86	25.9C	218.4	600.	5.79	34.24	27.00	114.0	1.553
391.	9.66	34.14	3.85	2.46	26.36	175.5	700.	5.17	34.33	27.15	101.0	1.661
49C.	7.14	34.1C	2.32	2.97	26.71	141.5	800.	4.80	34.39	27.24	92.8	1.759
586.	5.90	34.23	C.94	3.15	26.98	116.3	1CC0.	4.01	34.49	27.40	78.0	1.932
783.	4.88	34.38	0.80	3.22	27.22	94.5	1200.	3.44	34.54	27.50	68.9	2.081
977.	4.08	34.48	1.12	3.15	27.39	79.1						
1172.	3.54	34.52	1.34	3.10	27.47	71.3						
1467.	2.93	34.58	1.48		27.58	61.6						

CROMWELL 8, STATION 16, 23-30N LAT, 153-57W LONG, SEP. 9, 1964, 02CO G.C.T.
DRY BULB 24.9 WET BULB 22.1 WIND SPEED 17, DIR. C9 BAR. 18 WEATHER 02 VIS. 8 CLOUD TYPE 8, COVER 7

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
C.	25.63	34.93	5.02	0.14	23.12	476.3	C.	25.63	34.93	23.12	476.3	0.000
1C.Δ	25.63	34.93	5.CO	1.C5	23.12	476.7	1C.	25.63	34.93	23.12	476.7	0.048
2C.	25.63	34.98			23.15	473.5	20.	25.63	34.98	23.15	473.5	0.096
5C.	25.20	35.22	5.08	0.14	23.47	444.8	30.	25.64	35.07	23.22	467.7	0.143
76.	23.18	35.2C	5.C9	0.12	24.C5	389.8	5C.	25.2C	35.22	23.47	444.8	0.235
101.	22.11	35.22	4.91	0.18	24.37	360.1	75.	23.26	35.20	24.03	391.9	0.341
127.	20.60	35.13	4.75	0.34	24.72	327.9	100.	22.15	35.22	24.36	361.1	0.435
152.	19.76	35.07	4.69	C.36	24.9C	311.8	15C.	19.83	35.08	24.88	313.0	0.605
177.	18.21	34.90	4.57	C.44	25.16	287.2	2CC.	16.81	34.71	25.36	268.9	0.752
192.	17.32	34.78	4.54	0.68	25.29	275.5	250.	14.65	34.48	25.67	240.2	0.880
226.	15.37	34.54	4.49		25.55	250.6	300.	12.27	34.27	25.99	210.3	0.994
252.	14.59	34.48	4.60	0.76	25.68	239.3	400.	9.27	34.1C	26.39	171.9	1.187
278.	12.96	34.32	4.69	0.92	25.89	218.9	500.	6.67	34.04	26.73	139.5	1.344
304.	12.18	34.26	4.69	1.C8	26.CC	209.1	600.	5.46	34.11	26.94	119.5	1.475
404.	9.15	34.10	5.11	1.57	26.41	170.4	700.	4.81	34.23	27.11	103.9	1.588
5C6.	6.54	34.C4	2.53	2.55	26.75	137.9	80C.	4.41	34.34	27.24	91.6	1.686
605.	5.43	34.12	1.31	2.97	26.95	118.6	1CCC.	3.90	34.48	27.40	77.4	1.857
807.	4.39	34.35	0.82		27.25	90.9	1200.	3.42	34.54	27.50	68.7	2.005
1008.	3.88	34.48	1.18	3.C1	27.41	77.C						
1208.	3.40	34.54	1.45	3.18	27.5C	68.4						
1480.	2.84	34.58	1.56	3.C6	27.59	60.6						

CROMWELL 8, STATION 17, 23-27N LAT, 151- OW LONG, SEP. 9, 1964, 19CO G.C.T.
DRY BULB 22.9 WET BULB 20.2 WIND SPEED 14, DIR. C9 BAR. 2C WEATHER 03 VIS. 7 CLOUD TYPE 6, COVER 5

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
C.	24.95	35.16			23.5C	439.8	C.	24.95	35.16	23.50	439.8	0.000
10.	24.92	35.17			23.51	438.6	1C.	24.92	35.17	23.51	438.6	0.044
3C.Δ	24.86	35.18			23.54	437.0	20.	24.89	35.18	23.53	437.7	0.088
5C.Δ	24.82	35.18			23.55	436.6	3C.	24.86	35.18	23.54	437.0	0.132
77.	23.31	35.16			23.99	396.3	5C.	24.82	35.18	23.55	436.6	0.220
100.	22.16	35.22			24.36	361.4	75.	23.45	35.16	23.95	400.1	0.326
125.	21.12	35.28			24.69	330.5	100.	22.16	35.22	24.36	361.4	0.422
151.	20.68	35.26			24.80	321.5	150.	20.70	35.26	24.80	321.6	0.594
177.	19.68	35.C8			24.93	310.0	200.	18.16	34.89	25.17	287.6	0.747
191.	18.72	34.96			25.C8	295.5	250.	15.22	34.53	25.58	249.1	0.883
225.	16.68	34.70			25.38	267.8	300.	12.29	34.26	25.98	210.9	0.999
251.	15.16	34.52			25.59	248.3	400.	9.40	34.08	26.36	175.8	1.194
277.	13.34	34.34			25.83	224.9	500.	6.99	34.04	26.69	144.1	1.355
301.	12.25	34.26			25.99	210.3	600.	5.40	34.12	26.95	118.4	1.488
402.	9.36	34.08			26.36	175.2	700.	4.76	34.26	27.14	101.1	1.599
502.	6.95	34.04			26.69	143.5	80C.	4.54	34.40	27.27	89.2	1.695
602.	5.38	34.12			26.96	118.0	1000.	3.97	34.50	27.41	76.6	1.862
802.	4.54	34.40			27.27	89.0	1200.	3.51	34.54	27.49	69.7	2.011
1001.	3.97	34.50			27.41	76.5						
120C.	3.51	34.54			27.49	69.7						
1498.	2.87	34.57			27.58	61.8						

TEMPERATURE ERROR TERM AT 70C. METERS IS 0.12

ΔFROM BT DATA

Table 1.--Continued

CROMWELL 8, STATION 18, 22- ON LAT, 151- 1W LCNG, SEP. 10, 1964, 0400 G.C.T.
DRY BULB 24.9 WET BULB 21.2 WIND SPEED 2C, DIR. 07 BAR. 17 WEATHER 02 VIS. 8 CLOUD TYPE 6, COVER 5

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA				
DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.08	35.07			23.39	450.1	0.	25.08	35.07	23.39	450.1	0.000
10.	25.06	35.08			23.40	449.2	10.	25.06	35.08	23.40	449.2	0.045
30.Δ	25.02	35.08			23.42	448.8	20.	25.04	35.08	23.41	448.9	0.091
50.Δ	24.98	35.08			23.43	448.5	30.	25.02	35.08	23.42	448.8	0.136
77.	22.63	35.14			24.17	379.1	50.	24.98	35.08	23.43	448.5	0.226
101.	21.61	35.20			24.50	348.2	75.	22.83	35.13	24.11	384.8	0.331
126.	21.13	35.22			24.65	335.1	100.	21.64	35.20	24.49	349.1	0.424
151.	20.62	35.23			24.79	322.1	150.	20.64	35.23	24.79	322.6	0.593
177.	19.67	35.10			24.94	308.3	200.	18.51	34.94	25.12	292.0	0.748
192.	18.90	35.00			25.07	297.0	250.	14.52	34.44	25.66	240.6	0.882
226.	16.88	34.72			25.35	270.9	300.	11.86	34.18	26.00	208.8	0.995
252.	14.33	34.42			25.69	238.3	400.	8.73	34.04	26.43	168.1	1.185
278.	12.96	34.28			25.86	221.8	500.	6.31	34.04	26.77	134.9	1.338
303.	11.72	34.17			26.02	207.2	600.	5.09	34.14	27.01	112.8	1.463
404.	8.64	34.04			26.44	166.8	700.	4.61	34.29	27.18	96.7	1.569
506.	6.19	34.04			26.79	133.2	800.	4.43	34.43	27.31	85.4	1.661
606.	5.05	34.15			27.02	111.7	1000.	3.94	34.51	27.42	75.4	1.824
807.	4.43	34.44			27.32	84.7	1200.	3.40	34.54	27.50	68.4	1.970
1008.	3.92	34.51			27.43	75.3	1500.	2.78	34.58	27.59	60.0	2.165
1208.	3.38	34.54			27.50	68.2						
1508.	2.76	34.58			27.59	59.9						

CROMWELL 8, STATION 19, 20-30N LAT, 150-59W LCNG, SEP. 10, 1964, 1400 G.C.T.
DRY BULB 24.5 WET BULB 20.8 WIND SPEED 22, DIR. 06 BAR. 16 WEATHER 02 VIS. 8 CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.71	34.85			23.03	484.4	0.	25.71	34.85	23.03	484.4	0.000
10.Δ	25.69	34.86			23.05	483.5	10.	25.69	34.86	23.05	483.5	0.049
30.Δ	25.68	34.86			23.05	484.0	20.	25.68	34.86	23.05	483.6	0.097
50.Δ	25.66	34.86			23.05	484.2	30.	25.68	34.86	23.05	484.0	0.146
75.	23.26	34.83			23.75	418.6	50.	25.66	34.86	23.05	484.2	0.244
101.	22.14	34.89			24.12	384.7	75.	23.26	34.83	23.75	418.6	0.357
126.	21.13	35.00			24.48	351.0	100.	22.17	34.89	24.10	385.8	0.459
152.	20.09	35.07			24.81	320.1	150.	20.19	35.07	24.79	322.4	0.637
176.	18.30	34.83			25.09	294.3	200.	16.29	34.55	25.36	269.1	0.786
192.	17.02	34.64			25.25	278.8	250.	12.80	34.23	25.86	221.3	0.910
226.	14.11	34.33			25.67	239.6	300.	10.48	34.16	26.23	186.0	1.013
252.	12.70	34.23			25.88	219.8	400.	7.81	34.13	26.64	147.7	1.181
277.	11.22	34.17			26.11	197.6	500.	6.88	34.31	26.91	122.5	1.317
303.	10.41	34.16			26.25	184.8	600.	6.21	34.38	27.06	109.7	1.435
404.	7.73	34.13			26.65	146.5	700.	5.57	34.42	27.17	99.2	1.540
505.	6.86	34.32			26.92	121.6	800.	5.02	34.46	27.27	90.6	1.636
605.	6.18	34.38			27.06	109.2	1000.	4.30	34.51	27.39	80.0	1.809
806.	4.99	34.46			27.27	90.2	1200.	3.71	34.55	27.48	71.5	1.962
1008.	4.28	34.51			27.39	79.6	1500.	2.98	34.58	27.57	62.4	2.166
1208.	3.69	34.55			27.48	71.2						
1508.	2.96	34.58			27.58	62.3						

CROMWELL 8, STATION 20, 19- ON LAT, 150-59W LCNG, SEP. 10, 1964, 2300 G.C.T.
DRY BULB 25.7 WET BULB 21.8 WIND SPEED 22, DIR. 05 BAR. 16 WEATHER 01 VIS. 8 CLOUD TYPE 8, COVER 2

DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	25.83	34.76			22.93	494.5	0.	25.83	34.76	22.93	494.4	0.000
11.Δ	25.88	34.77			22.92	495.6	10.	25.88	34.77	22.92	495.6	0.050
30.Δ	25.88	34.78			22.93	495.7	20.	25.89	34.78	22.92	495.8	0.100
50.Δ	25.88	34.78			22.93	496.5	30.	25.88	34.78	22.93	495.7	0.150
75.Δ	25.87	34.79			22.94	496.5	50.	25.88	34.78	22.93	496.5	0.250
99.	23.08	35.01			23.94	401.6	75.	25.87	34.79	22.94	496.5	0.375
124.	22.40	35.08			24.19	378.9	100.	23.03	35.01	23.96	400.1	0.488
149.	21.34	35.10			24.50	350.1	150.	21.31	35.10	24.51	349.3	0.676
173.	20.36	35.06			24.73	328.5	200.	18.51	34.85	25.05	298.5	0.840
186.	19.41	34.96			24.90	312.3	250.	13.89	34.32	25.71	236.4	0.975
219.	17.10	34.68			25.26	278.6	300.	10.63	34.14	26.19	190.3	1.082
244.	14.41	34.37			25.63	243.3	400.	7.88	34.19	26.68	144.1	1.251
270.	12.39	34.21			25.92	215.9	500.	6.60	34.23	26.89	124.1	1.386
294.	10.90	34.14			26.14	194.5	600.	6.23	34.37	27.05	110.5	1.505
391.	8.06	34.19			26.65	146.7	700.	5.71	34.42	27.15	101.0	1.612
489.	6.66	34.22			26.87	126.0	800.	5.18	34.45	27.24	93.7	1.710
586.	6.30	34.36			27.03	112.1	1000.	4.41	34.52	27.39	80.2	1.886
789.	5.23	34.44			27.23	94.5	1200.	3.75	34.56	27.48	71.2	2.039
976.	4.50	34.52			27.37	81.3						
1171.	3.83	34.54			27.46	73.3						
1466.	3.08	34.58			27.56	63.4						

ΔFROM BT DATA

Table 1.--Continued

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA				
CROMWELL 8, STATION 21, 17-31N LAT, 151- 3W LONG, SEP. 11, 1964, 0SCO G.C.T.											
DRY BULB 25.4 WET BULB 22.2 WIND SPEED 2C, DIR. C6 BAR. 16 WEATHER 02 VIS. 6 CLOUD TYPE , COVER											
DEPTH	TEMP.	SAL.	CXY.	PC4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
C.	25.88	34.62			22.81	506.0	C.	25.88	34.62	22.81	506.0	0.000
10.	25.86	34.61			22.8C	506.5	10.	25.86	34.61	22.80	506.5	0.051
30.Δ	25.82	34.60			22.81	506.8	20.	25.84	34.60	22.81	506.7	0.102
50.Δ	25.80	34.60			22.82	507.0	3C.	25.82	34.60	22.81	506.8	0.153
73.	24.10	34.51			23.26	465.2	50.	25.80	34.60	22.82	507.0	0.255
94.	22.38	34.63			23.85	409.7	75.	23.92	34.52	23.32	459.7	0.377
118.	21.47	34.81			24.24	373.3	100.	22.08	34.67	23.97	398.7	0.485
143.	21.C6	35.01			24.5C	349.1	150.	20.63	34.98	24.60	340.5	0.671
167.	19.29	34.84			24.84	317.3	200.	16.32	34.54	25.34	270.2	0.825
180.	18.19	34.75			25.C5	297.7	250.	12.00	34.23	26.01	206.6	0.945
212.	15.16	34.42			25.51	254.5	300.	10.01	34.28	26.41	168.7	1.040
237.	12.87	34.27			25.87	219.8	400.	7.75	34.23	26.73	139.1	1.195
262.	11.36	34.22			26.12	196.C	500.	6.61	34.31	26.95	118.7	1.326
285.	10.48	34.28			26.33	176.8	600.	6.20	34.42	27.09	106.6	1.439
379.	8.14	34.23			26.67	144.7	700.	5.70	34.45	27.18	98.4	1.543
475.	6.76	34.28			26.91	122.7	8CC.	5.20	34.47	27.26	91.9	1.639
569.	6.36	34.40			27.C5	109.7	1000.	4.36	34.52	27.39	80.1	1.813
761.	5.38	34.46			27.22	94.7	1200.	3.67	34.55	27.48	71.1	1.966
953.	4.54	34.51			27.3E	82.4						
1146.	3.84	34.53			27.45	74.0						
1441.	3.04	34.58			27.57	62.8						

CROMWELL 8, STATION 22, 16- ON LAT, 151- 3W LONG, SEP. 11, 1964, 18CO G.C.T.											
DRY BULB 25.7 WET BULB 22.9 WIND SPEED 22, DIR. C6 BAR. 15 WEATHER 01 VIS. 8 CLOUD TYPE 8, COVER 5											
DEPTH	TEMP.	SAL.	CXY.	PC4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
C.	25.99	34.62			22.77	509.3	C.	25.99	34.62	22.77	509.3	0.000
10.	26.03	34.62			22.76	510.8	10.	26.03	34.62	22.76	510.8	0.051
30.Δ	26.03	34.62			22.76	511.6	20.	26.04	34.62	22.76	511.4	0.103
50.Δ	26.03	34.62			22.76	512.4	3C.	26.03	34.62	22.76	511.6	0.154
75.Δ	25.00	34.62			23.C8	483.1	50.	26.03	34.62	22.76	512.4	0.258
101.	22.52	34.60			23.7S	415.9	75.	25.00	34.62	23.08	483.1	0.383
125.	20.27	34.78			24.54	344.7	100.	22.63	34.60	23.76	418.9	0.497
149.	17.30	34.62			25.17	285.3	150.	17.20	34.61	25.19	283.5	0.674
176.	14.72	34.4C			25.59	245.6	200.	12.73	34.30	25.93	213.6	0.799
191.	13.35	34.30			25.8C	225.7	250.	10.10	34.31	26.42	167.4	0.895
224.	11.40	34.36			26.22	185.6	3CC.	9.51	34.44	26.62	149.1	0.975
250.	10.10	34.31			26.42	167.4	40C.	8.03	34.46	26.87	126.5	1.114
276.	9.95	34.44			26.54	155.9	500.	6.96	34.47	27.03	111.8	1.234
300.	9.51	34.44			26.62	149.1	600.	6.28	34.46	27.11	104.5	1.343
4C1.	8.02	34.46			26.87	126.3	70C.	5.63	34.48	27.21	96.0	1.445
501.	6.95	34.47			27.C3	111.7	8CC.	5.06	34.50	27.29	88.1	1.538
601.	6.27	34.46			27.11	104.5	1000.	4.30	34.52	27.39	79.1	1.707
800.	5.06	34.50			27.29	88.1	1200.	3.70	34.55	27.48	71.1	1.859
1000.	4.30	34.52			27.3S	79.1						
1199.	3.74	34.56			27.48	71.0						
1452.	3.05	34.58			27.57	63.0						

CROMWELL 8, STATION 23, 14-28N LAT, 15C-58W LONG, SEP. 12, 1964, 03CO G.C.T.											
DRY BULB 26.8 WET BULB 24.9 WIND SPEED 20, DIR. C6 BAR. 13 WEATHER 01 VIS. 8 CLOUD TYPE 8, COVER 2											
DEPTH	TEMP.	SAL.	CXY.	PC4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.32	34.60			22.65	520.5	C.	26.32	34.60	22.65	520.5	0.000
11.	26.36	34.60			22.64	522.2	10.	26.36	34.60	22.64	522.1	0.053
3C.Δ	26.30	34.61			22.67	520.4	20.	26.34	34.60	22.65	521.7	0.105
50.Δ	26.26	34.62			22.69	519.3	3C.	26.30	34.61	22.67	520.4	0.158
75.Δ	25.50	34.63			22.93	497.0	5C.	26.26	34.62	22.69	519.3	0.262
100.	22.95	34.73			23.76	418.3	75.	25.50	34.63	22.93	497.0	0.390
124.	21.38	35.C6			24.4E	353.1	100.	22.95	34.73	23.76	418.3	0.506
15C.	18.93	34.92			25.CC	302.1	150.	18.93	34.92	25.CO	302.1	0.687
175.	15.80	34.52			25.44	259.8	200.	12.45	34.29	25.97	209.2	0.816
188.	13.50	34.30			25.77	228.6	250.	10.42	34.43	26.45	164.0	0.910
222.	11.56	34.42			26.24	184.C	30C.	9.96	34.56	26.64	147.6	0.989
248.	10.44	34.42			26.44	165.0	4CC.	8.60	34.52	26.82	130.8	1.129
273.	10.32	34.53			26.55	155.4	500.	7.46	34.50	26.98	116.9	1.254
299.	9.97	34.56			26.63	147.9	600.	6.64	34.50	27.10	106.6	1.367
397.	8.64	34.52			26.82	131.3	70C.	5.85	34.5C	27.20	97.3	1.470
495.	7.51	34.50			26.97	117.4	8CC.	5.17	34.50	27.28	89.4	1.564
594.	6.69	34.50			27.C9	107.2	1CC0.	4.26	34.52	27.40	78.4	1.734
791.	5.22	34.50			27.27	90.C	12CC.	3.58	34.55	27.50	69.5	1.884
989.	4.30	34.52			27.3S	79.0						
1186.	3.66	34.56			27.49	69.9						
1482.	2.92	34.59			27.59	60.9						

TEMPERATURE ERROR TERM AT 20C. METERS IS 0.20

ΔFROM BT DATA

Table 1.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 8, STATION 24, 12-57N LAT, 151- 1W LONG, SEP. 12, 1964, 1200 G.C.T.
DRY BULB 26.0 WET BULB 24.4 WIND SPEED 10, DIR. 03 BAR. 13 WEATHER 02 VIS. 8 CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.56	33.58			21.81	601.2	0.	26.56	33.58	21.81	601.2	0.000
10.	26.65	33.63			21.82	600.7	10.	26.65	33.63	21.82	600.7	0.061
20.Δ	26.65	33.65			21.84	599.6	20.	26.65	33.65	21.84	599.6	0.121
30.Δ	26.64	33.68			21.86	597.6	30.	26.64	33.68	21.86	597.6	0.181
51.	22.88	34.66			23.73	419.5	50.	23.09	34.61	23.63	429.1	0.285
77.	21.51	34.90			24.30	366.4	75.	21.57	34.90	24.28	367.6	0.385
102.	19.32	35.00			24.96	304.2	100.	19.56	35.01	24.90	309.6	0.470
127.	14.22	34.35			25.66	237.7	150.	12.12	34.31	26.05	200.2	0.599
152.	12.03	34.33			26.08	197.5	200.	11.45	34.70	26.48	160.7	0.690
177.	11.71	34.65			26.39	168.8	250.	10.48	34.66	26.63	147.5	0.767
192.	11.58	34.70			26.45	163.1	300.	9.61	34.62	26.74	137.7	0.839
226.	10.94	34.68			26.56	154.0	400.	8.43	34.57	26.89	124.1	0.971
253.	10.40	34.66			26.64	146.8	500.	7.33	34.54	27.03	111.9	1.091
279.	9.92	34.61			26.68	142.9	600.	6.43	34.52	27.14	102.1	1.199
304.	9.55	34.62			26.75	136.6	700.	5.72	34.52	27.23	94.0	1.298
405.	8.38	34.57			26.90	123.7	800.	5.15	34.53	27.31	87.1	1.389
506.	7.27	34.54			27.04	111.2	1000.	4.23	34.55	27.42	76.1	1.554
607.	6.37	34.52			27.15	101.5	1200.	3.61	34.58	27.51	68.1	1.700
808.	5.11	34.53			27.31	86.6						
1009.	4.20	34.55			27.43	75.7						
1209.	3.59	34.58			27.52	67.8						
1478.	2.87	34.62			27.62	58.1						

CROMWELL 8, STATION 25, 11-27N LAT, 151- 0W LONG, SEP. 12, 1964, 2100 G.C.T.
DRY BULB 27.2 WET BULB 24.0 WIND SPEED 08, DIR. 21 BAR. 15 WEATHER 02 VIS. 9 CLOUD TYPE 1, COVER 3

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	27.21	33.27			21.37	643.2	0.	27.21	33.27	21.37	643.2	0.000
10.	26.89	33.29			21.49	632.4	10.	26.89	33.29	21.49	632.4	0.064
20.Δ	26.84	33.31			21.52	629.9	20.	26.84	33.31	21.52	629.9	0.128
30.Δ	25.80	33.61			22.07	577.5	30.	25.80	33.61	22.07	577.5	0.189
51.	14.26	34.39			25.68	233.4	50.	14.85	34.36	25.53	247.9	0.272
77.	12.00	34.44			26.17	187.0	75.	11.91	34.45	26.20	184.4	0.326
101.	11.47	34.59			26.39	167.0	100.	11.48	34.58	26.38	167.6	0.371
126.	10.98	34.66			26.53	153.9	150.	10.62	34.66	26.60	148.0	0.450
152.	10.59	34.66			26.60	147.7	200.	9.98	34.65	26.70	139.0	0.522
178.	10.29	34.66			26.66	143.2	250.	9.50	34.64	26.77	133.4	0.591
192.	10.08	34.66			26.69	140.0	300.	8.98	34.61	26.84	127.8	0.657
226.	9.70	34.63			26.73	136.7	400.	7.66	34.56	27.00	113.5	0.779
252.	9.49	34.64			26.78	133.1	500.	6.67	34.54	27.12	102.6	0.888
278.	9.28	34.64			26.81	130.3	600.	5.85	34.52	27.21	94.3	0.987
303.	8.93	34.61			26.84	127.4	700.	5.23	34.53	27.30	87.0	1.079
404.	7.61	34.56			27.01	112.9	800.	4.76	34.55	27.37	80.7	1.164
505.	6.63	34.54			27.13	102.1	1000.	4.04	34.57	27.46	72.3	1.318
605.	5.81	34.52			27.22	93.9	1200.	3.45	34.59	27.54	65.3	1.458
806.	4.74	34.55			27.37	80.4						
1008.	4.02	34.57			27.46	72.0						
1208.	3.43	34.59			27.54	65.1						
1498.	2.80	34.62			27.62	57.3						

TEMPERATURE ERROR TERM AT 50. METERS IS 0.16
TEMPERATURE ERROR TERM AT 75. METERS IS 0.14

CROMWELL 8, STATION 26, 9-58N LAT, 147-58W LONG, SEP. 13, 1964, 1600 G.C.T.
DRY BULB 26.9 WET BULB 24.3 WIND SPEED 13, DIR. 05 BAR. 13 WEATHER 02 VIS. 7 CLOUD TYPE 8, COVER 2

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	27.20	32.98	5.01	0.34	21.16	663.8	0.	27.20	32.98	21.16	663.8	0.000
9.Δ	27.27	33.10	4.90	0.39	21.23	657.7	10.	27.27	33.11	21.23	656.8	0.067
20.Δ	27.20	33.22			21.34	647.3	20.	27.20	33.22	21.34	647.3	0.132
30.	27.08	33.33			21.46	636.1	30.	27.08	33.33	21.46	636.1	0.197
38.	23.72	34.47	5.41	0.55	23.34	456.0	50.	22.16	34.63	23.91	402.0	0.301
47.	22.47	34.63	5.35	0.50	23.83	410.4	75.	14.19	34.40	25.71	231.6	0.381
56.	21.16	34.59	5.07	0.53	24.16	378.9	100.	12.60	34.48	26.09	195.9	0.435
65.	17.62	34.47	4.21	1.12	24.98	300.9	150.	11.23	34.73	26.54	153.8	0.523
71.	15.06	34.42	3.09	1.56	25.53	248.3	200.	10.75	34.74	26.63	145.9	0.599
96.	12.77	34.44	1.63	2.29	26.02	201.8	250.	10.29	34.72	26.70	140.5	0.671
119.	12.05	34.66	0.64	2.39	26.33	172.8	300.	9.88	34.71	26.77	135.1	0.740
143.	11.34	34.72	0.43	2.68	26.51	156.2	400.	9.18	34.67	26.85	129.0	0.874
181.	10.93	34.74	0.41	2.69	26.60	148.4	500.	8.46	34.64	26.95	121.2	1.000
238.	10.40	34.72	0.42	2.66	26.68	142.0	600.	7.46	34.58	27.04	112.8	1.118
286.	9.99	34.72	0.42	2.52	26.75	136.2	700.	6.50	34.55	27.15	102.7	1.227
381.	9.30	34.67	0.41	2.81	26.83	130.4	800.	5.71	34.54	27.25	93.7	1.326
477.	8.67	34.66	0.40	3.11	26.92	123.0	1000.	4.70	34.56	27.38	81.5	1.504
572.	7.75	34.59	0.36	3.06	27.01	115.6	1200.	3.96	34.58	27.48	72.5	1.660
764.	5.95	34.54	0.63	2.90	27.22	96.4						
956.	4.89	34.55	1.00	3.23	27.35	83.9						
1148.	4.17	34.58	1.38	3.22	27.46	74.4						
1441.	3.36	34.59	1.67	3.10	27.55	66.0						

TEMPERATURE ERROR TERM AT 75. METERS IS 0.27

ΔFROM BT DATA

Table 1.--Continued

CROMWELL 8, STATION 27, 11-30N LAT, 148- 3W LONG, SEP. 14, 1964, 0100 G.C.T.
DRY BULB 24.6 WET BULB 27.0 WIND SPEED 16, DIR. 05 BAR. 12 WEATHER 02 VIS. 8 CLOUD TYPE 8, COVER 2

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.Δ	27.20	33.10			21.25	655.2	0.	27.20	33.10	21.25	655.2	0.000
10.	27.07	33.12	4.81	0.26	21.30	650.1	10.	27.07	33.12	21.30	650.1	0.066
20.Δ	26.00	33.68			22.06	578.0	20.	26.00	33.68	22.06	578.0	0.128
26.	24.03	34.37	5.14	0.40	23.18	471.5	30.	22.61	34.53	23.71	420.7	0.178
36.	20.64	34.58	4.90	0.55	24.29	365.4	50.	17.88	34.68	25.08	290.8	0.250
51.	17.73	34.68	4.32	0.74	25.11	287.7	75.	14.24	34.46	25.74	228.7	0.315
61.	16.06	34.53	3.50	1.09	25.39	261.3	100.	12.23	34.67	26.30	175.3	0.366
76.	14.13	34.46	1.89	2.12	25.76	226.4	150.	10.98	34.70	26.56	151.7	0.448
93.	12.46	34.62	0.44	2.35	26.22	182.7	200.	10.54	34.70	26.64	145.0	0.523
103.	12.17	34.68	0.27		26.33	173.1	250.	10.09	34.70	26.72	138.8	0.595
126.	11.37	34.69	0.48	2.70	26.49	158.5	300.	9.71	34.68	26.77	134.6	0.664
178.	10.76	34.70	0.24	2.77	26.60	148.3	400.	8.87	34.64	26.88	125.9	0.795
226.	10.31	34.70	0.34	2.70	26.68	141.7	500.	7.99	34.58	26.97	118.5	0.918
278.	9.86	34.69	0.37	2.69	26.75	136.0	600.	7.02	34.55	27.08	108.2	1.033
304.	9.68	34.68	0.34	2.81	26.78	134.3	700.	6.18	34.53	27.18	99.1	1.138
404.	8.83	34.64	0.31	2.86	26.88	125.6	800.	5.50	34.53	27.27	91.5	1.234
505.	7.94	34.58	0.35	3.10	26.97	118.1	1000.	4.59	34.55	27.39	80.6	1.408
605.	6.97	34.55	0.42	3.29	27.09	107.7	1200.	3.91	34.58	27.48	71.8	1.562
808.	5.45	34.53	0.63	3.58	27.27	91.0	1500.	3.09	34.62	27.59	60.9	1.764
1008.	4.56	34.55	1.17	3.59	27.39	80.2						
1208.	3.89	34.58	1.43	3.19	27.49	71.4						
1508.	3.07	34.62	1.80	3.15	27.60	60.7						

CROMWELL 8, STATION 28, 13- 3N LAT, 148- 1W LONG, SEP. 14, 1964, 1100 G.C.T.
DRY BULB 25.2 WET BULB 24.2 WIND SPEED 24, DIR. 07 BAR. 15 WEATHER 02 VIS. 6 CLOUD TYPE , COVER

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.Δ	26.96	33.40			21.55	626.2	0.	26.96	33.40	21.55	626.2	0.000
10.Δ	26.96	33.40	4.92	0.32	21.55	626.6	10.	26.96	33.40	21.55	626.6	0.063
20.Δ	26.91	33.52			21.66	616.9	20.	26.91	33.52	21.66	616.9	0.126
25.Δ	26.90	33.54	4.89	0.29	21.67	615.3	30.	26.00	33.92	22.24	561.1	0.185
30.Δ	26.00	33.92			22.24	561.1	50.	20.32	34.76	24.51	344.8	0.276
38.	23.42	34.40	5.31	0.49	23.38	452.7	75.	16.81	34.52	25.21	279.3	0.355
51.	20.13	34.77	5.18	0.35	24.57	339.3	100.	12.70	34.26	25.90	214.1	0.417
61.	19.28	34.74	4.80	0.64	24.77	320.7	150.	11.29	34.60	26.43	164.4	0.512
77.	16.41	34.48	3.47	1.16	25.27	273.1	200.	10.42	34.67	26.64	145.2	0.590
92.	14.11	34.34	3.58	1.23	25.67	235.2	250.	9.88	34.66	26.73	137.9	0.662
102.	12.38	34.24	3.02	1.45	25.95	209.3	300.	9.20	34.63	26.81	130.5	0.729
127.	11.81	34.48	1.05	2.37	26.24	181.8	400.	7.95	34.56	26.96	117.8	0.855
178.	10.73	34.66	0.27	2.70	26.58	150.7	500.	7.00	34.52	27.06	108.6	0.969
226.	10.12	34.66	0.17	2.66	26.69	141.4	600.	6.21	34.52	27.17	99.3	1.074
279.	9.54	34.65	0.20	2.72	26.78	133.7	700.	5.60	34.53	27.25	91.8	1.170
304.	9.13	34.62	0.17	2.39	26.82	129.9	800.	5.10	34.54	27.32	85.7	1.260
405.	7.90	34.56	0.44	2.54	26.96	117.2	1000.	4.21	34.56	27.43	75.1	1.423
506.	6.95	34.52	0.44	3.22	27.07	108.1	1200.	3.61	34.58	27.51	68.0	1.568
607.	6.16	34.52	0.51	2.99	27.17	98.6	1500.	2.92	34.61	27.60	59.6	1.762
809.	5.06	34.54	0.74		27.33	85.2						
1009.	4.18	34.56	1.21	3.15	27.44	74.7						
1209.	3.59	34.58	1.49	3.41	27.52	67.8						
1509.	2.91	34.61	1.84	3.12	27.60	59.5						

CROMWELL 8, STATION 29, 14-28N LAT, 147-58W LONG, SEP. 14, 1964, 1900 G.C.T.
DRY BULB 26.3 WET BULB 24.8 WIND SPEED 20, DIR. 06 BAR. 16 WEATHER 02 VIS. 8 CLOUD TYPE 8, COVER 4

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.Δ	26.78	33.73			21.85	597.0	0.	26.78	33.73	21.85	597.0	0.000
10.Δ	26.67	33.74	4.85	1.20	21.90	593.4	10.	26.67	33.74	21.90	593.4	0.060
30.Δ	26.58	33.76			21.94	590.0	20.	26.83	33.73	21.83	599.7	0.120
61.	19.54	34.56	4.60		24.57	340.1	30.	26.58	33.76	21.94	590.0	0.180
68.	16.30	34.42	3.08	1.44	25.25	274.8	50.	23.20	34.36	23.41	450.3	0.285
77.	14.57	34.37	2.49	1.90	25.60	241.9	75.	14.80	34.37	25.55	246.3	0.372
86.	13.74	34.35	2.24	1.91	25.76	226.9	100.	12.45	34.36	26.03	201.6	0.429
94.	12.91	34.32	2.12	1.95	25.90	213.2	150.	10.33	34.45	26.49	158.6	0.520
102.	12.32	34.38	1.69	2.55	26.07	197.9	200.	9.89	34.57	26.66	143.5	0.596
127.	11.49	34.52	0.79		26.33	173.2	250.	8.79	34.47	26.76	134.7	0.666
153.	10.19	34.44	1.20		26.50	157.2	300.	8.16	34.47	26.86	125.7	0.732
192.	10.04	34.58	0.38	3.71	26.64	145.3	400.	7.52	34.52	26.99	114.6	0.853
253.	8.72	34.46	0.53	3.49	26.76	134.3	500.	6.84	34.50	27.07	107.8	0.965
279.	8.33	34.45	0.52	3.70	26.81	129.6	600.	6.10	34.50	27.17	99.2	1.070
304.	8.14	34.48	0.42	2.92	26.87	124.9	700.	5.52	34.51	27.24	92.3	1.166
404.	7.50	34.52	0.42	2.88	26.99	114.3	800.	5.04	34.52	27.31	86.4	1.257
507.	6.79	34.50	0.52		27.07	107.3	1000.	4.19	34.56	27.44	74.8	1.420
607.	6.05	34.50	0.62	2.90	27.17	98.6	1200.	3.60	34.57	27.51	68.5	1.565
807.	5.01	34.52	0.68	3.41	27.32	86.0						
1007.	4.16	34.56	1.06	3.20	27.44	74.5						
1207.	3.58	34.57	1.41	3.40	27.51	68.4						
1495.	2.85	34.60	1.72	3.10	27.60	59.4						

TEMPERATURE ERROR TERM AT 20. METERS IS 0.15
TEMPERATURE ERROR TERM AT 50. METERS IS 0.13
SALINITY ERROR TERM AT 50. METERS IS 0.12

ΔFROM BT DATA

Table 1.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 8, STATION 30, 16- ON LAT, 148- 3W LONG, SEP. 15, 1964, 0400 G.C.T.
DRY BULB 26.5 WET BULB 23.7 WIND SPEED 20, DIR. 08 BAR. 15 WEATHER 02 VIS.-8 CLOUD TYPE 8, COVER 4

DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.39	34.10	3.69	0.54	22.26	558.6	0.	26.39	34.10	22.26	558.6	0.000
10.	26.35	34.09	4.20	0.29	22.26	558.6	10.	26.35	34.09	22.26	558.6	0.056
30.Δ	26.24	34.09			22.29	556.1	20.	26.30	34.09	22.28	557.5	0.112
50.Δ	26.16	34.10			22.33	553.7	30.	26.24	34.09	22.29	556.1	0.169
76.	22.50	34.66	5.11	0.52	23.84	410.1	50.	26.16	34.10	22.33	553.7	0.280
101.	20.91	34.75	4.82	0.45	24.35	362.4	75.	22.66	34.64	23.78	416.1	0.402
126.	18.63	34.76	4.24	0.72	24.95	305.6	100.	20.96	34.75	24.33	363.6	0.501
150.	15.91	34.51	4.00	0.86	25.41	262.2	150.	15.91	34.51	25.41	262.2	0.658
175.	13.16	34.24	4.17	1.56	25.79	226.0	200.	11.80	34.23	26.05	201.7	0.775
191.	12.06	34.16	3.86	1.43	25.95	211.5	250.	11.03	34.63	26.50	159.9	0.966
224.	11.52	34.51	0.90	2.62	26.32	176.7	300.	10.65	34.67	26.60	151.2	0.945
251.	11.01	34.63	0.40	2.56	26.50	159.5	400.	9.55	34.64	26.77	137.1	1.090
277.	10.94	34.68	0.19	2.76	26.56	155.2	500.	8.56	34.60	26.90	126.0	1.223
301.	10.63	34.67	0.16	2.70	26.60	151.1	600.	7.37	34.52	27.01	115.5	1.345
401.	9.54	34.64	0.27	2.66	26.77	137.0	700.	6.51	34.50	27.11	106.2	1.457
503.	8.53	34.60	0.35	3.10	26.90	125.7	800.	5.84	34.51	27.21	97.6	1.560
602.	7.35	34.52	0.41	2.82	27.01	115.3	1000.	4.65	34.52	27.36	83.6	1.744
802.	5.83	34.51	0.62	3.34	27.21	97.5	1200.	3.90	34.54	27.45	74.5	1.904
1001.	4.65	34.52	0.77	3.41	27.36	83.5	1500.	3.06	34.58	27.57	63.4	2.113
1201.	3.90	34.54	1.08	2.93	27.45	74.5						
1500.	3.06	34.58	1.44	2.78	27.57	63.4						

CROMWELL 8, STATION 31, 17-28N LAT, 147-59W LONG, SEP. 15, 1964, 1400 G.C.T.
DRY BULB 25.0 WET BULB 22.8 WIND SPEED 20, DIR. 06 BAR. 16 WEATHER 02 VIS. 8 CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.70	34.56	4.73	0.52	22.82	505.0	0.	25.70	34.56	22.82	505.0	0.000
10.Δ	25.68	34.56	4.86	0.63	22.82	504.8	10.	25.68	34.56	22.82	504.8	0.051
30.Δ	25.68	34.56			22.82	505.6	20.	25.69	34.56	22.82	505.6	0.102
50.Δ	25.42	34.56			22.90	498.7	30.	25.68	34.56	22.82	505.6	0.153
77.	23.39	34.79	5.15	0.41	23.68	425.2	50.	25.42	34.56	22.90	498.7	0.254
99.	22.18	34.82	5.10	0.40	24.05	390.8	75.	23.56	34.77	23.62	431.3	0.371
124.	21.20	35.01	4.94	0.27	24.47	352.0	100.	22.13	34.83	24.07	389.1	0.474
151.	20.39	35.04	4.66	0.54	24.71	329.9	150.	20.43	35.04	24.70	330.6	0.656
177.	18.80	34.88	4.31	0.91	25.00	302.8	200.	16.87	34.62	25.28	276.7	0.809
191.	17.76	34.74	4.17	1.38	25.15	288.6	250.	12.23	34.18	25.93	214.6	0.933
223.	14.48	34.35	3.68	1.36	25.60	245.6	300.	10.44	34.31	26.36	174.2	1.031
250.	12.23	34.18	3.24	1.58	25.93	214.6	400.	8.94	34.47	26.73	139.7	1.189
276.	11.19	34.19	2.78	2.07	26.13	195.5	500.	7.69	34.47	26.92	122.3	1.321
302.	10.38	34.32	1.85	2.46	26.38	172.5	600.	6.82	34.47	27.05	111.3	1.439
402.	8.92	34.47	0.48		26.74	139.5	700.	6.09	34.48	27.15	101.7	1.547
502.	7.67	34.47	0.37	3.22	26.93	122.1	800.	5.48	34.50	27.24	93.5	1.645
604.	6.79	34.47	0.37	3.43	27.05	111.0	1000.	4.61	34.52	27.36	83.0	1.824
803.	5.46	34.50	0.56	3.56	27.25	93.3	1200.	3.92	34.54	27.45	74.7	1.984
1002.	4.60	34.52	0.79	3.29	27.36	82.9	1500.	3.06	34.58	27.57	63.4	2.194
1201.	3.92	34.54	1.06	3.45	27.45	74.7	2000.	2.23	34.63	27.68	52.2	2.488
1500.	3.06	34.58	1.44	3.26	27.57	63.4	2500.	1.83	34.66	27.73	47.1	2.741
1989.	2.24	34.63	2.02	2.80	27.68	52.4	3000.	1.64	34.68	27.77	44.7	2.975
2487.	1.84	34.66	2.50	2.51	27.73	47.2	4000.	1.44	34.70	27.79	43.5	3.427
2985.	1.64	34.68	2.87	2.75	27.76	44.7						
3994.	1.46	34.69	3.54	2.31	27.79	44.2						
4991.	1.45	34.70	3.89	2.48	27.79	45.9						

CROMWELL 8, STATION 32, 19- ON LAT, 147-54W LONG, SEP. 16, 1964, 0100 G.C.T.
DRY BULB 26.7 WET BULB 23.1 WIND SPEED 16, DIR. 05 BAR. 17 WEATHER 02 VIS. 8 CLOUD TYPE 8, COVER 5

DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	25.57	34.77	4.80	0.29	23.01	486.1	0.	25.57	34.77	23.01	486.0	0.000
10.	25.52	34.76	4.82	0.29	23.02	485.7	10.	25.52	34.76	23.02	485.7	0.049
30.Δ	25.38	34.74			23.05	483.8	20.	25.45	34.75	23.04	484.8	0.098
50.Δ	25.32	34.74			23.07	482.8	30.	25.38	34.74	23.05	483.8	0.147
75.	24.00	34.78	5.09	0.29	23.50	443.0	50.	25.32	34.74	23.07	482.8	0.244
100.	22.71	34.94	5.04	0.26	23.95	396.5	75.	24.00	34.78	23.50	443.0	0.361
125.	22.26	35.08	4.96	0.19	24.23	375.2	100.	22.71	34.94	23.99	396.5	0.466
150.	21.58	35.17	4.82	0.36	24.48	351.4	150.	21.58	35.17	24.48	351.4	0.655
174.	20.36	35.02	4.63	0.44	24.70	331.4	200.	18.56	34.88	25.06	297.7	0.818
187.	19.70	35.01	4.50	0.56	24.87	315.9	250.	14.52	34.42	25.65	241.7	0.954
221.	16.55	34.62	4.00	0.83	25.35	270.5	300.	11.08	34.15	26.12	196.6	1.065
247.	14.82	34.46	4.38	0.77	25.61	245.4	400.	7.98	34.12	26.61	150.6	1.240
272.	12.40	34.19	3.93	1.97	25.90	217.6	500.	6.71	34.21	26.86	127.5	1.381
295.	11.29	34.16	3.49	1.52	26.09	200.0	600.	6.06	34.33	27.04	111.4	1.501
393.	8.12	34.12	2.70	2.24	26.59	152.8	700.	5.48	34.40	27.17	99.6	1.608
491.	6.79	34.20	1.40	2.86	26.84	129.3	800.	4.99	34.45	27.26	91.1	1.704
591.	6.12	34.32	0.67	3.10	27.02	112.7	1000.	4.31	34.51	27.38	80.2	1.878
783.	5.06	34.44	0.90	3.24	27.25	92.3	1200.	3.68	34.55	27.48	71.2	2.031
978.	4.38	34.50	1.07	3.28	27.37	81.3						
1174.	3.75	34.54	1.18		27.47	72.4						
1420.	3.08	34.58	1.42	3.20	27.56	63.1						

TEMPERATURE ERROR TERM AT 200. METERS IS 0.12

ΔFROM BT DATA

Table 1.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 8, STATION 33, 20-33N LAT, 147-58W LONG, SEP. 16, 1964, 1100 G.C.T.
DRY BULB 24.2 WET BULB 21.7 WIND SPEED 14, DIR. 05 BAR. 15 WEATHER 02 VIS. 8 CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.21	34.80	4.82	0.27	23.15	473.3	0.	25.21	34.80	23.15	473.3	0.000
9.	25.27	34.80	4.82	0.39	23.13	475.4	10.	25.27	34.80	23.13	475.5	0.048
30.Δ	25.22	34.80			23.14	474.8	20.	25.26	34.80	23.13	475.6	0.096
50.Δ	25.16	34.80			23.16	473.8	30.	25.22	34.80	23.14	474.8	0.144
75.Δ	25.12	34.80			23.17	473.7	50.	25.16	34.80	23.16	473.8	0.239
100.	22.84	34.97	5.06		23.98	397.9	75.	25.12	34.80	23.17	473.7	0.358
124.	22.02	35.12	4.96	0.26	24.32	365.8	100.	22.84	34.97	23.98	397.9	0.468
150.	20.50	35.04	4.62	0.87	24.68	332.7	150.	20.50	35.04	24.68	332.7	0.652
175.	19.20	34.94	4.36	0.47	24.94	308.2	200.	17.82	34.79	25.17	286.9	0.808
191.	18.40	34.86	4.30	0.71	25.08	295.1	250.	14.33	34.40	25.67	239.7	0.941
225.	16.06	34.57	4.10	1.08	25.42	263.4	300.	11.48	34.15	26.05	204.2	1.053
250.	14.33	34.40	4.43	1.72	25.67	239.7	400.	8.05	34.04	26.53	157.8	1.236
277.	12.54	34.22	4.64	1.38	25.90	218.2	500.	6.19	34.07	26.81	131.1	1.382
300.	11.48	34.15	4.73		26.05	204.2	600.	5.46	34.25	27.05	109.1	1.503
400.	8.05	34.04	3.54	1.73	26.53	157.8	700.	5.04	34.38	27.20	95.4	1.606
502.	6.17	34.07	1.83	2.65	26.82	130.6	800.	4.74	34.46	27.30	87.1	1.698
603.	5.45	34.26	0.75	3.25	27.06	108.5	1000.	4.13	34.51	27.40	77.8	1.865
803.	4.73	34.46	0.80	3.10	27.30	86.9	1200.	3.59	34.54	27.48	70.6	2.016
1004.	4.12	34.51	0.98	3.58	27.41	77.6						
1203.	3.58	34.54	1.15	3.06	27.48	70.5						
1429.	2.95	34.56	1.49	3.28	27.56	63.1						

CROMWELL 8, STATION 34, 22- ON LAT, 147-58W LONG, SEP. 16, 1964, 1900 G.C.T.
DRY BULB 23.0 WET BULB 21.3 WIND SPEED 18, DIR. 07 BAR. 20 WEATHER 25 VIS. 8 CLOUD TYPE 6, COVER 7

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.35	34.88	4.72		23.16	471.6	0.	25.35	34.88	23.16	471.6	0.000
10.Δ	25.35	34.89	4.85	0.38	23.17	471.3	10.	25.35	34.89	23.17	471.3	0.047
30.Δ	25.35	34.89			23.17	472.1	20.	25.38	34.89	23.16	472.9	0.095
50.	24.80	34.96	4.91	0.25	23.39	451.9	30.	25.35	34.89	23.17	472.1	0.143
76.	23.90	34.89	5.07	0.16	23.61	432.3	50.	24.80	34.96	23.39	451.9	0.236
102.	22.11	35.12	5.18	0.15	24.30	367.4	75.	23.94	34.89	23.60	433.4	0.347
126.	21.34	35.20	5.04	0.78	24.57	342.1	100.	22.25	35.10	24.24	372.4	0.449
152.	20.45	35.12	4.78	0.57	24.75	325.7	150.	20.53	35.13	24.74	326.9	0.625
177.	19.16	35.00	4.53	0.34	25.00	302.9	200.	17.53	34.76	25.22	282.3	0.778
192.	18.12	34.84	4.43	0.41	25.14	289.9	250.	13.67	34.28	25.72	235.4	0.909
226.	15.55	34.50	4.36	0.97	25.48	257.4	300.	10.72	34.11	26.15	193.6	1.017
252.	13.52	34.26	4.00	0.72	25.73	233.6	400.	7.92	34.07	26.58	153.7	1.192
279.	11.80	34.14	4.11	1.33	25.98	210.3	500.	6.04	34.10	26.85	127.1	1.334
304.	10.54	34.11	3.79	1.70	26.18	190.7	600.	5.44	34.26	27.06	108.6	1.453
404.	7.86	34.07	3.16	2.42	26.59	152.8	700.	5.00	34.37	27.20	96.0	1.556
506.	5.96	34.10	1.59	2.64	26.87	125.7	800.	4.61	34.44	27.29	87.1	1.649
607.	5.43	34.27	0.73	3.50	27.07	107.6	1000.	4.04	34.52	27.42	76.1	1.814
808.	4.58	34.44	0.86	3.21	27.30	86.6	1200.	3.45	34.55	27.50	68.3	1.960
1009.	4.02	34.52	1.10	3.29	27.42	75.7	1500.	2.82	34.60	27.60	59.2	2.154
1210.	3.42	34.55	1.35	3.10	27.51	67.9						
1508.	2.81	34.60	1.59		27.60	59.0						

CROMWELL 8, STATION 35, 23-27N LAT, 147-59W LONG, SEP. 17, 1964, 0400 G.C.T.
DRY BULB 24.3 WET BULB 20.5 WIND SPEED 22, DIR. 08 BAR. 18 WEATHER 01 VIS. 8 CLOUD TYPE 8, COVER 2

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.80	35.20	4.90	0.34	23.57	432.6	0.	24.80	35.20	23.57	432.6	0.000
10.Δ	24.81	35.21	4.92	0.29	23.58	432.6	10.	24.81	35.21	23.58	432.6	0.044
30.Δ	24.81	35.21			23.58	433.4	20.	24.81	35.21	23.58	432.9	0.087
50.Δ	24.81	35.21			23.58	434.2	30.	24.81	35.21	23.58	433.4	0.131
76.	21.60	35.27	4.96	0.28	24.55	342.0	50.	24.81	35.21	23.58	434.2	0.218
101.	20.98	35.28	4.96	0.18	24.73	326.0	75.	21.73	35.27	24.52	345.7	0.316
126.	20.36	35.23	4.83	0.24	24.86	314.5	100.	20.98	35.28	24.73	325.9	0.401
152.	19.43	35.11	4.75	0.32	25.01	300.7	150.	19.52	35.12	25.00	301.9	0.559
179.	17.92	34.86	4.55	0.60	25.20	283.3	200.	16.38	34.63	25.39	265.5	0.702
193.	16.87	34.70	4.59	0.56	25.33	271.1	250.	12.90	34.23	25.84	223.6	0.825
226.	14.61	34.40	4.21	0.80	25.61	244.8	300.	10.66	34.12	26.17	191.8	0.930
252.	12.77	34.22	4.29	1.03	25.85	221.9	400.	8.21	34.04	26.51	160.0	1.108
279.	11.31	34.14	4.62	1.20	26.07	201.4	500.	6.16	34.03	26.79	133.6	1.256
304.	10.56	34.12	4.73	1.24	26.19	190.3	600.	5.07	34.12	26.99	114.0	1.381
404.	8.13	34.04	3.60	1.94	26.52	159.0	700.	4.60	34.25	27.15	99.5	1.489
505.	6.08	34.03	2.05	3.25	26.80	132.5	800.	4.40	34.38	27.27	88.7	1.584
607.	5.02	34.13	1.43	3.18	27.01	112.8	1000.	3.91	34.50	27.42	76.0	1.751
808.	4.39	34.39	0.77	3.30	27.28	88.0	1200.	3.42	34.53	27.49	69.4	1.898
1009.	3.89	34.50	1.14	3.24	27.42	75.6	1500.	2.82	34.58	27.59	60.5	2.095
1209.	3.40	34.53	1.35	3.52	27.49	69.2						
1509.	2.80	34.58	1.62	2.88	27.59	60.3						

ΔFROM BT DATA

Table 1.--Continued

CROMWELL 8, STATION 36, 25- ON LAT, 147-59W LONG, SEP. 17, 1964, 1400 G.C.T.
DRY BULB 21.5 WET BULB 20.0 WIND SPEED 22, DIR. 06 BAR. 19 WEATHER 25 VIS. 5 CLOUD TYPE , COVER

ORIGINAL DATA						DERIVED DATA	INTERPOLATED DATA				
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.40	35.22	5.02	0.16	23.71	419.7	0.	24.40	35.22	23.71	419.7	0.000
10.Δ	24.41	35.22	4.95	0.25	23.71	420.4	10.	24.41	35.22	23.71	420.4	0.042
30.Δ	24.30	34.84			23.45	445.4	20.	24.39	35.00	23.55	435.6	0.085
49.	23.90	35.32	5.22	0.19	23.93	400.2	30.	24.30	34.84	23.45	445.4	0.130
73.	21.97	35.26	5.31	0.14	24.44	352.4	50.	23.83	35.32	23.96	397.9	0.215
98.	20.87	35.26	5.21	0.18	24.75	324.4	75.	21.86	35.26	24.47	349.5	0.309
122.	20.31	35.26	5.15	0.23	24.90	310.9	100.	20.82	35.26	24.76	323.0	0.394
147.	19.62	35.18	5.12	0.19	25.02	300.2	150.	19.47	35.15	25.03	298.9	0.550
172.	18.50	34.95		0.30	25.13	290.3	200.	17.47	34.82	25.28	276.2	0.695
186.	18.24	34.94	4.91	0.45	25.19	285.3	250.	14.17	34.39	25.70	237.5	0.825
219.	16.11	34.61	4.90	0.52	25.44	261.4	300.	11.77	34.19	26.02	206.9	0.937
245.	14.42	34.41	4.83	0.65	25.66	240.7	400.	8.86	34.05	26.42	169.3	1.127
271.	13.19	34.30	4.83	0.71	25.83	224.7	500.	6.59	34.02	26.73	139.7	1.283
295.	11.97	34.20	4.93	1.18	25.99	209.4	600.	5.61	34.09	26.90	123.0	1.415
392.	9.09	34.06	4.35	1.59	26.39	172.2	700.	4.89	34.20	27.07	107.2	1.532
492.	6.70	34.02	2.65	1.90	26.71	141.3	800.	4.41	34.31	27.22	93.8	1.633
590.	5.69	34.08	1.34	2.56	26.89	124.8	1000.	3.95	34.48	27.40	78.1	1.807
787.	4.46	34.30	0.51	3.58	27.20	95.3	1200.	3.54	34.55	27.49	69.5	1.957
985.	3.98	34.47	1.05	3.30	27.35	78.7						
1176.	3.64	34.52	1.21	3.50	27.46	72.5						
1461.	2.95	34.57	1.54	3.23	27.57	62.6						

SALINITY ERROR TERM AT 200. METERS IS 0.06

CROMWELL 8, STATION 37, 26-28N LAT, 148- 0W LONG, SEP. 17, 1964, 2200 G.C.T.
DRY BULB 24.0 WET BULB 21.0 WIND SPEED 22, DIR. 07 BAR. 21 WEATHER 02 VIS. 8 CLOUD TYPE 8, COVER 3

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.32	35.36	4.96	0.19	23.84	407.3	0.	24.32	35.36	23.84	407.3	0.000
8.Δ	24.29	35.36	5.00	0.33	23.85	406.8	10.	24.28	35.32	23.82	409.4	0.041
30.Δ	24.18	34.88			23.52	439.1	20.	24.23	35.11	23.68	423.6	0.083
50.Δ	24.10	34.89			23.55	436.9	30.	24.18	34.88	23.52	439.1	0.127
72.	21.29	35.30	5.21	0.35	24.66	331.5	50.	24.10	34.89	23.55	436.9	0.215
97.	20.72	35.28	5.19	0.20	24.80	319.1	75.	21.15	35.31	24.71	327.1	0.311
120.	20.24	35.26	5.08	0.15	24.92	309.1	100.	20.66	35.28	24.82	317.7	0.392
145.	19.67	35.22	5.00	0.45	25.03	298.5	150.	19.53	35.19	25.05	297.0	0.547
170.	18.81	35.07	4.91	0.40	25.14	289.0	200.	16.81	34.78	25.41	263.9	0.688
180.	18.33	35.01	4.91	0.24	25.22	282.2	250.	14.02	34.52	25.83	224.9	0.812
202.	16.65	34.76	4.74	1.10	25.43	262.0	300.	12.22	34.33	26.05	204.7	0.920
221.	15.63	34.66	4.77	0.50	25.59	247.3	400.	9.42	34.14	26.40	171.8	1.110
239.	14.58	34.56	4.78	0.76	25.74	232.9	500.	7.15	34.03	26.66	146.9	1.271
257.	13.69	34.49	4.80	0.72	25.88	220.3	600.	5.50	34.06	26.89	124.1	1.408
329.	11.46	34.24	4.98	0.59	26.12	197.9	700.	4.78	34.15	27.05	109.4	1.526
400.	9.42	34.14	4.96	1.32	26.40	171.8	800.	4.44	34.26	27.17	98.1	1.631
474.	7.69	34.04	4.02	2.04	26.59	153.7	1000.	3.66	34.46	27.41	75.7	1.806
614.	5.33	34.07	1.53	2.88	26.92	121.2						
761.	4.60	34.22	0.62	3.15	27.12	102.6						
907.	4.03	34.37	0.59	3.12	27.30	86.0						
1029.	3.56	34.49	1.11	3.19	27.45	72.6						

SALINITY ERROR TERM AT 200. METERS IS 0.05

CROMWELL 8, STATION 38, 24-55N LAT, 151- 5W LONG, SEP. 18, 1964, 1600 G.C.T.
DRY BULB 24.0 WET BULB 20.5 WIND SPEED 14, DIR. 09 BAR. 21 WEATHER 02 VIS. 8 CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.09	35.00			23.33	455.4	0.	25.09	35.00	23.33	455.4	0.000
10.Δ	25.08	35.00			23.34	455.5	10.	25.08	35.00	23.34	455.5	0.046
30.Δ	25.08	35.00			23.34	456.3	20.	25.08	35.00	23.34	455.9	0.092
50.Δ	25.07	35.00			23.34	456.8	30.	25.08	35.00	23.34	456.3	0.138
74.	22.83	35.00			24.00	394.5	50.	25.07	35.00	23.34	456.8	0.230
97.	21.64	35.15			24.45	352.5	75.	22.76	35.01	24.03	392.3	0.337
120.	20.96	35.22			24.69	330.5	100.	21.54	35.17	24.49	348.9	0.430
142.	20.14	35.16			24.87	314.6	150.	19.90	35.13	24.90	311.1	0.596
165.	19.46	35.08			24.98	304.1	200.	17.69	34.89	25.28	276.6	0.744
177.	19.08	35.08			25.08	295.1	250.	14.37	34.52	25.76	231.7	0.873
204.	17.39	34.94			25.32	273.2	300.	11.90	34.30	26.08	201.1	0.982
226.	15.87	34.65			25.54	252.3	400.	9.05	34.09	26.42	169.5	1.169
246.	14.65	34.54			25.71	236.0	500.	7.06	34.02	26.66	146.2	1.328
263.	13.47	34.46			25.90	218.3	600.	5.38	34.10	26.94	119.5	1.462
331.	11.06	34.19			26.15	194.5	700.	4.64	34.20	27.11	103.6	1.575
400.	9.05	34.09			26.42	169.5	800.	4.30	34.31	27.23	92.4	1.674
472.	7.63	34.02			26.58	154.2	1000.	3.73	34.47	27.41	75.9	1.844
609.	5.25	34.11			26.96	117.2	1200.	3.28	34.53	27.51	67.7	1.990
749.	4.48	34.26			27.17	98.1						
890.	4.04	34.40			27.33	83.8						
1107.	3.47	34.51			27.47	70.7						
1200.**	3.28**	34.53**			27.51	67.7						

TEMPERATURE ERROR TERM AT 300. METERS IS 0.14

ΔFROM BT DATA
**EXTRAPOLATED DATA

Table 1.--Continued

CROMWELL 8, STATION 39, 25- ON LAT, 154- 1W LONG, SEP. 19, 1964, 0600 G.C.T.
DRY BULB 25.0 WET BULB 22.1 WIND SPEED 14, DIR. 07 BAR. 21 WEATHER 01 VIS. 8 CLOUD TYPE , COVER

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA				
DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.05	35.42	4.96	0.20	23.66	424.0	0.	25.05	35.42	23.66	424.0	0.000
10.Δ	24.98	35.42	5.00	1.08	23.69	422.4	10.	24.98	35.42	23.69	422.4	0.043
30.Δ	24.88	35.42			23.72	420.3	20.	24.92	35.42	23.70	421.1	0.085
50.Δ	24.84	35.42			23.73	419.9	30.	24.88	35.42	23.72	420.3	0.127
74.	21.59	35.22	5.28	0.92	24.52	345.3	50.	24.84	35.42	23.73	419.9	0.212
98.	20.96	35.28	5.22	0.35	24.74	325.3	75.	21.55	35.22	24.53	343.9	0.308
121.	19.56	35.07	4.90	1.32	24.95	305.8	100.	20.85	35.27	24.76	323.5	0.392
146.	18.50	34.92	4.71	0.96	25.11	291.6	150.	18.33	34.90	25.13	289.3	0.547
170.	17.43	34.78	4.67	1.28	25.26	277.3	200.	15.86	34.60	25.49	255.7	0.684
185.	16.69	34.69	4.80		25.37	267.5	250.	13.19	34.33	25.85	222.2	0.805
218.	14.83	34.50	4.87		25.64	241.8	300.	11.50	34.21	26.09	200.2	0.911
244.	13.47	34.35	4.80		25.81	225.8	400.	9.34	34.11	26.39	172.8	1.099
269.	12.41	34.27	4.90		25.96	211.8	500.	6.90	34.00	26.66	145.9	1.260
293.	11.67	34.22	4.95		26.07	202.4	600.	5.52	34.03	26.87	126.2	1.398
392.	9.55	34.12	4.73		26.36	175.2	700.	4.76	34.15	27.05	109.3	1.517
488.	7.12	34.00	3.54		26.64	148.6	800.	4.34	34.28	27.20	95.2	1.620
586.	5.66	34.02	2.04		26.84	128.8	1000.	3.71	34.45	27.40	76.9	1.794
780.	4.42	34.26	0.57		27.18	97.7	1200.	3.22	34.54	27.52	65.9	1.939
977.	3.77	34.44	0.89		27.39	78.4						
1163.	3.33	34.52	1.27		27.49	68.7						
1446.	2.75	34.58	1.59		27.59	59.4						

CROMWELL 8, STATION 40, 24-59N LAT, 157- 0W LONG, SEP. 19, 1964, 2000 G.C.T.
DRY BULB 27.7 WET BULB 23.5 WIND SPEED 12, DIR. 07 BAR. 23 WEATHER 03 VIS. 8 CLOUD TYPE 2, COVER 5

DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.63	35.00			23.17	471.2	0.	25.63	35.00	23.17	471.2	0.000
10.Δ	25.59	35.00			23.18	470.5	10.	25.59	35.00	23.18	470.5	0.047
30.Δ	25.52	35.00			23.20	469.2	20.	25.55	35.00	23.19	469.8	0.095
50.Δ	25.50	35.01			23.22	468.7	30.	25.52	35.00	23.20	469.2	0.142
77.	24.10	35.07			23.69	425.0	50.	25.50	35.01	23.22	468.7	0.237
102.	22.81	35.15			24.12	384.2	75.	24.23	35.06	23.64	429.0	0.350
127.	21.87	35.16			24.40	359.0	100.	22.91	35.14	24.09	387.2	0.452
153.	20.77	35.12			24.67	334.0	150.	20.91	35.13	24.63	336.9	0.635
178.	19.23	34.97			24.96	306.8	200.	18.28	34.89	25.13	290.7	0.793
193.	18.63	34.92			25.07	296.3	250.	15.71	34.60	25.53	254.0	0.930
227.	16.84	34.73			25.36	269.3	300.	13.31	34.34	25.84	224.8	1.051
254.	15.50	34.58			25.56	251.3	400.	10.08	34.13	26.28	183.7	1.257
279.	13.97	34.41			25.76	232.4	500.	7.74	34.02	26.57	156.0	1.429
304.	13.21	34.33			25.85	223.7	600.	5.94	34.03	26.81	132.1	1.574
405.	9.93	34.12			26.30	181.7	700.	4.98	34.14	27.02	112.5	1.698
507.	7.60	34.02			26.58	154.3	800.	4.49	34.29	27.19	96.8	1.804
608.	5.82	34.03			26.83	130.4	1000.	3.86	34.44	27.38	79.3	1.982
809.	4.47	34.30			27.20	95.6	1200.	3.32	34.54	27.51	67.6	2.131
1010.	3.84	34.45			27.39	78.7	1500.	2.76	34.58	27.59	59.7	2.324
1211.	3.29	34.54			27.51	67.1						
1511.	2.74	34.58			27.60	59.6						

CROMWELL 8, STATION 41, 23-29N LAT, 157- 0W LONG, SEP. 20, 1964, 0600 G.C.T.
DRY BULB 26.0 WET BULB 24.0 WIND SPEED 14, DIR. 05 BAR. 19 WEATHER 02 VIS. 7 CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.64	34.92			23.11	477.3	0.	25.64	34.92	23.11	477.3	0.000
11.Δ	25.70	34.92			23.09	479.5	10.	25.70	34.92	23.09	479.4	0.048
50.Δ	25.60	34.94			23.13	476.7	20.	25.69	34.92	23.09	479.3	0.096
75.Δ	25.60	34.94			23.13	477.7	30.	25.67	34.93	23.10	478.8	0.145
102.	23.79	34.98			23.71	423.7	50.	25.60	34.94	23.13	476.7	0.241
127.	22.47	35.11			24.19	378.8	75.	25.60	34.94	23.13	477.7	0.361
153.	20.96	35.08			24.59	341.8	100.	23.95	34.97	23.66	428.5	0.475
178.	19.35	34.98			24.94	309.1	150.	21.14	35.09	24.54	345.7	0.670
193.	18.59	34.89			25.06	297.5	200.	18.20	34.85	25.12	291.6	0.831
226.	16.71	34.69			25.36	269.2	250.	15.36	34.56	25.57	250.1	0.968
253.	15.21	34.54			25.59	248.0	300.	13.30	34.35	25.85	224.1	1.087
279.	14.18	34.43			25.73	235.2	400.	9.68	34.13	26.34	177.1	1.290
305.	13.09	34.33			25.88	221.4	500.	7.06	34.04	26.68	144.8	1.452
405.	9.53	34.12			26.36	175.1	600.	5.53	34.09	26.92	121.9	1.587
507.	6.91	34.04			26.70	143.0	700.	4.81	34.21	27.09	105.4	1.702
607.	5.46	34.10			26.93	120.5	800.	4.46	34.33	27.23	93.1	1.802
807.	4.45	34.34			27.24	92.4	1000.	3.90	34.48	27.40	77.5	1.975
1009.	3.88	34.48			27.41	77.0	1200.	3.31	34.54	27.51	67.3	2.121
1203.	3.30	34.54			27.51	67.2						
1495.	2.80	34.58			27.59	60.3						

ΔFROM BT DATA

Table 1.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 8, STATION 42, 22- ON LAT, 156-59W LONG, SEP. 20, 1964, 1600 G.C.T.
DRY BULB 26.4 WET BULB 23.6 WIND SPEED 20, DIR. 08 BAR. 18 WEATHER 01 VIS. 7 CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	CXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
C.	25.62	35.15			23.29	460.1	0.	25.62	35.15	23.29	460.1	0.000
10.Δ	25.66	35.14			23.27	462.4	10.	25.66	35.14	23.27	462.4	0.046
30.Δ	25.56	35.11			23.27	462.5	20.	25.62	35.12	23.26	463.0	0.093
50.Δ	25.46	35.11			23.30	460.3	30.	25.56	35.11	23.27	462.5	0.140
75.Δ	25.46	35.11			23.30	461.3	50.	25.46	35.11	23.30	460.3	0.233
102.	22.56	35.07			24.13	383.2	75.	25.46	35.11	23.30	461.3	0.349
126.	20.84	35.04			24.59	340.6	100.	22.81	35.07	24.06	389.6	0.456
151.	18.91	34.92			25.00	301.7	150.	18.98	34.93	24.99	303.0	0.630
178.	17.62	34.78			25.22	282.0	200.	16.60	34.69	25.39	266.1	0.774
193.	16.90	34.72			25.34	270.3	250.	13.44	34.34	25.81	225.9	0.898
226.	15.29	34.54			25.57	248.9	300.	11.72	34.21	26.05	204.2	1.006
252.	13.30	34.33			25.83	224.1	400.	8.85	34.06	26.43	168.3	1.194
279.	12.39	34.26			25.96	212.4	500.	6.75	34.09	26.76	136.6	1.348
304.	11.59	34.20			26.06	202.6	600.	5.66	34.21	26.99	114.8	1.475
405.	8.72	34.06			26.45	166.6	700.	5.06	34.31	27.14	101.1	1.584
506.	6.65	34.10			26.78	134.9	800.	4.68	34.38	27.25	91.9	1.682
607.	5.61	34.22			27.01	113.6	1000.	4.00	34.48	27.39	78.5	1.854
809.	4.66	34.39			27.25	91.3	1200.	3.42	34.54	27.50	68.8	2.003
1009.	3.97	34.48			27.40	78.1	1500.	2.77	34.58	27.59	59.9	2.199
1209.	3.40	34.54			27.50	68.4						
1510.	2.75	34.58			27.59	59.7						

ΔFROM BT DATA

Table 2.--Original and derived oceanographic data for Townsend Cromwell cruise 9

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 9, STATION 1, 20-33N LAT, 157-17W LONG, OCT. 2, 1964, 0600 G.C.T.
DRY BULB 26.4 WET BULB 22.0 WIND SPEED 18, DIR. 08 BAR. 19 WEATHER 03 VIS. 6 CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.15	34.94			22.96	491.0	0.	26.15	34.94	22.96	491.0	0.000
9.	26.17	34.94			22.96	491.9	10.	26.18	34.94	22.95	492.4	0.050
48.	25.74	34.94			23.09	480.7	20.	26.22	34.93	22.94	494.4	0.099
72.	24.24	35.02			23.61	432.4	30.	26.15	34.93	22.96	492.8	0.149
96.	23.16	35.09			23.98	397.9	50.	25.62	34.95	23.13	477.0	0.247
119.	22.26	35.10			24.24	373.5	75.	24.09	35.03	23.66	427.4	0.361
145.	21.04	35.06			24.55	345.0	100.	23.00	35.10	24.02	393.4	0.464
169.	19.60	34.97			24.86	315.7	150.	20.77	35.05	24.61	339.3	0.649
182.	18.62	34.90			25.06	297.2	200.	17.96	34.84	25.18	285.9	0.806
215.	17.40	34.78			25.27	278.1	250.	14.11	34.41	25.73	234.4	0.937
241.	15.14	34.51			25.58	248.3	300.	11.63	34.26	26.11	198.6	1.046
264.	12.72	34.29			25.92	216.1	400.	8.44	34.14	26.55	156.3	1.226
288.	12.07	34.28			26.04	205.2	500.	6.94	34.17	26.80	133.6	1.372
379.	8.85	34.15			26.50	161.5	600.	5.68	34.28	27.05	109.8	1.495
472.	7.41	34.15			26.71	141.4	700.	5.11	34.39	27.20	95.6	1.599
565.	5.97	34.24			26.98	116.2	800.	4.75	34.46	27.30	86.8	1.691
750.	4.98	34.44			27.26	90.9	1000.	4.05	34.52	27.42	76.2	1.856
933.	4.24	34.50			27.39	79.2	1200.	3.48	34.55	27.50	68.9	2.003
1122.	3.74	34.54			27.47	71.8						
1404.	3.01	34.54			27.54	65.1						

TEMPERATURE ERROR TERM AT 200. METERS IS 0.15

CROMWELL 9, STATION 2, 19- ON LAT, 157- OW LONG, OCT. 2, 1964, 1700 G.C.T.
DRY BULB 24.7 WET BULB 21.8 WIND SPEED 14, DIR. 13 BAR. 17 WEATHER 02 VIS. CLOUD TYPE 8, COVER 4

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.55	34.94			23.15	473.2	0.	25.55	34.94	23.15	473.2	0.000
10.	25.58	34.93			23.13	475.2	10.	25.58	34.93	23.13	475.2	0.048
50.Δ	25.58	34.93			23.13	476.8	20.	25.59	34.93	23.13	476.1	0.096
75.Δ	25.58	34.93			23.13	477.8	30.	25.59	34.93	23.13	476.6	0.144
102.	25.42	34.94			23.19	473.5	50.	25.58	34.93	23.13	476.8	0.240
127.	23.84	35.05			23.75	421.0	75.	25.58	34.93	23.13	477.8	0.360
152.	22.04	35.11			24.31	368.1	100.	25.46	34.94	23.17	474.8	0.480
177.	20.68	35.07			24.65	336.1	150.	22.18	35.11	24.27	371.9	0.693
193.	19.48	34.97			24.89	313.5	200.	18.93	34.91	24.99	304.3	0.864
226.	16.86	34.69			25.33	272.6	250.	14.91	34.48	25.61	245.7	1.002
253.	14.68	34.46			25.64	242.6	300.	11.99	34.26	26.03	205.7	1.116
280.	13.01	34.34			25.90	218.5	400.	7.86	34.15	26.64	147.2	1.294
305.	11.76	34.24			26.86	202.8	500.	6.29	34.24	26.94	119.5	1.429
405.	7.71	34.15			26.67	144.7	600.	5.52	34.34	27.12	103.2	1.541
506.	6.25	34.25			26.95	118.4	700.	5.09	34.43	27.23	92.7	1.640
607.	5.48	34.35			27.13	102.3	800.	4.82	34.49	27.31	86.1	1.731
808.	4.81	34.49			27.31	85.7	1000.	4.32	34.52	27.39	79.4	1.898
1010.	4.30	34.52			27.39	79.2	1200.	3.70	34.56	27.49	70.7	2.050
1210.	3.67	34.56			27.49	70.2	1500.	2.90	34.59	27.59	60.8	2.250
1510.	2.87	34.59			27.59	60.5						

CROMWELL 9, STATION 3, 17-30N LAT, 156-59W LONG, OCT. 3, 1964, 0200 G.C.T.
DRY BULB 25.8 WET BULB 22.5 WIND SPEED 19, DIR. 06 BAR. 15 WEATHER 02 VIS. 7 CLOUD TYPE 8, COVER 2

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.10	34.85			22.91	496.0	0.	26.10	34.85	22.91	496.0	0.000
10.	26.04	34.85			22.93	494.6	10.	26.04	34.85	22.93	494.6	0.050
30.Δ	25.90	34.85			22.97	491.2	20.	25.98	34.85	22.95	493.2	0.100
50.Δ	25.66	34.87			23.06	483.5	30.	25.90	34.85	22.97	491.2	0.149
76.	23.20	35.06			23.94	400.4	50.	25.66	34.87	23.06	483.5	0.247
101.	22.13	35.13			24.30	367.2	75.	23.30	35.05	23.91	403.9	0.359
126.	21.15	35.15			24.59	340.7	100.	22.16	35.13	24.29	368.0	0.456
152.	20.14	35.09			24.81	320.0	150.	20.22	35.10	24.80	321.4	0.630
177.	19.04	34.97			25.01	302.1	200.	17.02	34.73	25.32	272.4	0.780
191.	17.82	34.83			25.20	283.5	250.	13.96	34.37	25.72	234.7	0.908
225.	15.09	34.49			25.58	248.3	300.	10.58	34.27	26.30	179.8	1.012
252.	13.88	34.36			25.74	233.5	400.	7.92	34.25	26.72	140.5	1.174
277.	12.38	34.33			26.02	207.1	500.	6.53	34.29	26.94	119.3	1.305
302.	10.42	34.26			26.32	177.6	600.	5.84	34.37	27.09	105.6	1.418
402.	7.92	34.25			26.72	140.4	700.	5.33	34.44	27.21	95.1	1.520
503.	6.50	34.29			26.95	118.8	800.	4.92	34.49	27.30	87.2	1.612
604.	5.82	34.37			27.10	105.2	1000.	4.27	34.53	27.40	78.1	1.779
805.	4.90	34.49			27.30	86.8	1200.	3.65	34.57	27.50	69.3	1.928
1005.	4.26	34.53			27.41	77.9	1500.	2.93	34.60	27.59	60.4	2.126
1205.	3.64	34.57			27.50	69.1	2000.	2.15	34.64	27.70	50.3	2.407
1506.	2.92	34.60			27.60	60.3	2500.	1.80	34.67	27.75	45.9	2.652
1951.	2.20	34.64			27.69	51.0	3000.	1.59	34.69	27.77	43.5	2.880
2442.	1.83	34.67			27.74	46.2						
2934.	1.63	34.68			27.77	44.4						
3924.	1.47	34.70			27.79	43.5						

ΔFROM BT DATA

Table 2.--Continued

CROMWELL 9, STATION 4, 15-58N LAT, 157- 1W LONG, OCT. 3, 1964, 1300 G.C.T.
DRY BULB 25.2 WET BULB 22.4 WIND SPEED 18, DIR. 05 BAR. 14 WEATHER 02 VIS. 8 CLOUD TYPE , COVER

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.32	34.67			22.71	515.5	0.	26.32	34.67	22.71	515.5	0.000
7.	26.28	34.67			22.72	514.6	10.	26.27	34.67	22.72	514.4	0.052
30.Δ	26.22	34.67			22.74	513.7	20.	26.24	34.67	22.73	513.9	0.104
50.Δ	26.20	34.68			22.75	513.2	30.	26.22	34.67	22.74	513.7	0.155
71.	25.78	34.91			23.06	485.0	50.	26.20	34.68	22.75	513.2	0.259
94.	23.85	34.68			23.46	446.7	75.	25.50	34.87	23.11	479.8	0.384
118.	21.85	35.01			24.29	369.0	100.	23.35	34.75	23.67	427.6	0.498
142.	19.77	34.93			24.79	321.9	150.	19.24	34.91	24.91	310.6	0.684
166.	17.84	34.79			25.17	286.0	200.	13.28	34.29	25.81	224.9	0.819
179.	15.86	34.55			25.45	259.1	250.	11.34	34.34	26.22	186.9	0.923
209.	12.48	34.24			25.93	213.9	300.	10.81	34.44	26.39	171.2	1.013
234.	11.57	34.29			26.14	194.0	400.	9.48	34.58	26.73	140.5	1.171
258.	11.28	34.36			26.25	184.3	500.	8.32	34.58	26.92	123.7	1.304
281.	11.05	34.40			26.32	177.8	600.	7.25	34.54	27.04	112.4	1.423
373.	9.82	34.56			26.66	146.9	700.	6.26	34.50	27.14	103.1	1.532
467.	8.69	34.59			26.87	128.2	800.	5.58	34.48	27.22	96.1	1.633
559.	7.70	34.56			26.99	116.9	1000.	4.74	34.52	27.35	84.5	1.815
745.	5.88	34.48			27.18	99.6	1200.	3.97	34.55	27.46	74.3	1.976
930.	5.05	34.51			27.30	88.6						
1104.	4.31	34.54			27.41	78.7						
1326.	3.54	34.57			27.51	68.8						

CROMWELL 9, STATION 5, 14-31N LAT, 157- 1W LONG, OCT. 3, 1964, 2200 G.C.T.
DRY BULB 26.1 WET BULB 23.5 WIND SPEED 18, DIR. 07 BAR. 14 WEATHER 02 VIS. 8 CLOUD TYPE 8, COVER 4

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.93	33.83			21.88	594.4	0.	26.93	33.83	21.88	594.4	0.000
11.	26.82	33.82			21.91	592.2	10.	26.83	33.82	21.90	592.6	0.060
30.Δ	26.70	34.00			22.08	576.4	20.	26.75	33.89	21.99	585.2	0.119
50.Δ	26.62	34.10			22.18	567.6	30.	26.70	34.00	22.08	576.4	0.178
77.	25.27	34.62			22.99	491.1	50.	26.62	34.10	22.18	567.6	0.293
102.	22.33	34.81			24.00	395.7	75.	25.43	34.58	22.91	498.5	0.427
128.	19.91	34.87			24.71	329.2	100.	22.58	34.80	23.92	403.0	0.541
153.	17.20	34.70			25.26	277.3	150.	17.57	34.73	25.19	283.4	0.714
178.	13.18	34.33			25.86	219.9	200.	11.97	34.41	26.16	191.6	0.833
193.	12.17	34.37			26.09	198.1	250.	11.08	34.66	26.52	158.1	0.922
226.	11.65	34.58			26.35	174.0	300.	10.32	34.65	26.64	147.3	0.999
253.	11.00	34.67			26.54	156.4	400.	9.00	34.60	26.83	130.9	1.139
279.	10.45	34.64			26.61	149.7	500.	8.04	34.56	26.94	120.8	1.266
305.	10.30	34.65			26.65	146.9	600.	6.97	34.54	27.08	108.2	1.382
406.	8.91	34.60			26.84	129.8	700.	6.17	34.53	27.18	99.6	1.487
507.	7.98	34.56			26.95	120.2	800.	5.58	34.52	27.25	93.4	1.584
608.	6.88	34.54			27.09	107.2	1000.	4.67	34.55	27.38	81.7	1.761
809.	5.54	34.52			27.25	92.9	1200.	3.90	34.57	27.48	72.4	1.917
1011.	4.63	34.55			27.38	81.1						
1210.	3.87	34.57			27.48	71.9						
1477.	3.07	34.59			27.57	62.7						

CROMWELL 9, STATION 6, 13- 4N LAT, 157- 2W LONG, OCT. 4, 1964, 0700 G.C.T.
DRY BULB 26.6 WET BULB 23.9 WIND SPEED 21, DIR. 06 BAR. 12 WEATHER 03 VIS. 6 CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	27.07	33.64			21.69	612.3	0.	27.07	33.64	21.69	612.3	0.000
10.Δ	27.08	33.64			21.69	613.0	10.	27.08	33.64	21.69	613.0	0.062
30.Δ	26.70	33.71			21.86	597.2	20.	27.13	33.62	21.66	616.1	0.124
50.	23.08	34.53			23.58	434.4	30.	26.70	33.71	21.86	597.2	0.185
76.	21.51	34.88			24.28	367.8	50.	23.08	34.53	23.58	434.4	0.289
102.	19.30	34.80			24.81	318.2	75.	21.54	34.88	24.27	368.8	0.390
127.	15.33	34.46			25.50	252.7	100.	19.52	34.82	24.77	322.1	0.477
152.	12.00	34.24			26.02	203.5	150.	12.22	34.25	25.99	206.7	0.610
177.	10.80	34.28			26.27	179.9	200.	10.76	34.48	26.43	164.9	0.704
192.	10.82	34.43			26.38	169.5	250.	10.15	34.60	26.63	147.0	0.782
226.	10.43	34.57			26.56	153.3	300.	9.90	34.66	26.72	139.4	0.855
253.	10.12	34.60			26.64	146.4	400.	8.67	34.60	26.88	125.6	0.988
278.	10.08	34.65			26.68	142.6	500.	7.49	34.55	27.02	113.4	1.109
304.	9.86	34.66			26.73	138.8	600.	6.68	34.53	27.11	104.9	1.219
405.	8.60	34.60			26.89	124.9	700.	5.89	34.53	27.22	95.5	1.320
506.	7.43	34.55			27.02	112.7	800.	5.18	34.54	27.31	86.8	1.412
607.	6.63	34.53			27.12	104.3	1000.	4.28	34.55	27.42	76.7	1.578
808.	5.13	34.54			27.32	86.1	1200.	3.69	34.58	27.50	69.1	1.725
1009.	4.25	34.55			27.42	76.3	1500.	2.87	34.61	27.61	59.0	1.920
1212.	3.66	34.58			27.51	68.6						
1508.	2.85	34.61			27.61	58.7						

TEMPERATURE ERROR TERM AT 20. METERS IS 0.11

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA				

CROMWELL 9, STATION 7, 11-35N LAT, 157- 3W LONG, OCT. 4, 1964, 1600 G.C.T.
DRY BULB 26.7 WET BULB 23.6 WIND SPEED 08, DIR. 07 BAR. 11 WEATHER 81 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
2.	27.15	33.71			21.72	609.8	0.	27.15	33.71	21.72	609.7	0.000
12.	27.23	33.80			21.76	606.2	10.	27.22	33.79	21.76	606.4	0.061
20.Δ	27.23	33.80			21.76	606.5	20.	27.23	33.80	21.76	606.5	0.122
30.Δ	27.22	33.80			21.77	606.6	30.	27.22	33.80	21.77	606.6	0.183
52.	20.76	34.91			24.51	345.2	50.	21.44	34.80	24.24	370.9	0.282
78.	18.84	34.92			25.02	297.5	75.	18.95	34.97	25.03	296.7	0.366
103.	15.24	34.49			25.55	247.9	100.	15.71	34.55	25.48	253.7	0.435
128.	11.76	34.25			26.07	197.9	150.	10.28	34.17	26.28	178.5	0.544
154.	10.16	34.18			26.30	175.9	200.	10.40	34.63	26.62	147.4	0.626
178.	10.24	34.49			26.53	154.9	250.	9.94	34.67	26.72	138.2	0.698
193.	10.41	34.61			26.60	149.3	300.	9.34	34.63	26.80	132.1	0.767
228.	10.15	34.66			26.68	142.0	400.	8.32	34.59	26.93	121.1	0.894
255.	9.89	34.67			26.73	137.5	500.	7.31	34.55	27.04	110.7	1.011
280.	9.59	34.65			26.77	134.6	600.	6.37	34.54	27.16	99.9	1.118
306.	9.27	34.63			26.80	131.4	700.	5.62	34.54	27.26	91.1	1.214
406.	8.26	34.59			26.93	120.5	800.	5.03	34.55	27.34	84.1	1.303
508.	7.23	34.55			27.05	109.9	1000.	4.26	34.57	27.44	75.0	1.464
606.	6.32	34.54			27.17	99.3	1200.	3.62	34.59	27.52	67.5	1.608
810.	4.98	34.55			27.34	83.5	1500.	2.92	34.62	27.61	58.9	1.800
1010.	4.23	34.57			27.44	74.6	2000.	2.17	34.65	27.70	50.2	2.077
1212.	3.59	34.59			27.52	67.1	2500.	1.87	34.68	27.75	46.3	2.323
1519.	2.88	34.62			27.61	58.4	3000.	1.69	34.69	27.77	44.8	2.555
2012.	2.16	34.65			27.70	50.1	4000.	1.44	34.70	27.80	43.2	3.007
2510.	1.87	34.68			27.75	46.2						
3008.	1.69	34.69			27.77	44.8						
4002.	1.44	34.70			27.80	43.2						

TEMPERATURE ERROR TERM AT 50. METERS IS 0.18
TEMPERATURE ERROR TERM AT 75. METERS IS 0.14

CROMWELL 9, STATION 7A, 10- ON LAT, 153-56W LONG, OCT. 5, 1964, 1200 G.C.T.
DRY BULB 26.5 WET BULB 23.8 WIND SPEED 14, DIR. 08 BAR. 12 WEATHER 02 VIS. 8 CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	27.44	33.56	4.94		21.52	629.4	0.	27.44	33.56	21.52	629.4	0.000
9.	27.46	33.56	5.01		21.51	630.4	10.	27.46	33.56	21.51	630.5	0.063
20.Δ	27.46	33.56			21.51	630.8	20.	27.46	33.56	21.51	630.8	0.127
30.Δ	27.40	33.57			21.54	628.7	30.	27.40	33.57	21.54	628.7	0.190
44.	22.52	35.08	5.41		24.15	379.2	50.	22.00	35.08	24.30	365.4	0.291
50.Δ	22.00	35.08			24.30	365.4	75.	18.81	34.85	24.97	302.1	0.375
69.	19.95	34.97	5.15		24.77	320.9	100.	14.14	34.47	25.77	226.5	0.441
89.	16.00	34.56	4.05		25.43	258.7	150.	11.40	34.72	26.50	157.5	0.538
111.	12.70	34.46	1.61		26.05	199.4	200.	10.72	34.73	26.64	145.8	0.614
135.	11.65	34.64	0.61		26.39	167.4	250.	10.09	34.71	26.73	137.9	0.686
157.	11.32	34.74	0.29		26.53	154.7	300.	9.69	34.69	26.78	133.6	0.754
169.	11.08	34.74	0.25		26.58	150.7	400.	8.85	34.65	26.89	125.4	0.885
199.	10.73	34.73	0.41		26.63	146.1	500.	7.76	34.59	27.00	114.9	1.006
223.	10.38	34.73	0.45		26.69	140.6	600.	6.85	34.55	27.11	105.6	1.118
247.	10.12	34.71	0.53		26.72	138.2	700.	6.10	34.55	27.20	97.0	1.220
269.	9.90	34.70	0.55		26.75	135.8	800.	5.48	34.55	27.29	89.7	1.314
360.	9.28	34.67	0.47		26.83	129.7	1000.	4.53	34.56	27.41	78.6	1.485
442.	8.37	34.62	0.33		26.94	120.6	1200.	3.79	34.59	27.50	69.8	1.635
533.	7.44	34.57	0.41		27.04	111.9						
720.	5.97	34.55	0.77		27.22	95.4						
901.	4.96	34.56	1.10		27.35	83.5						
1084.	4.21	34.57	1.30		27.44	75.1						
1363.	3.37	34.61	1.78		27.56	64.1						

CROMWELL 9, STATION 8, 11-29N LAT, 153-56W LONG, OCT. 5, 1964, 2100 G.C.T.
DRY BULB 27.0 WET BULB 24.4 WIND SPEED 20, DIR. 08 BAR. 15 WEATHER 02 VIS. 8 CLOUD TYPE 8, COVER 2

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	27.20	33.65	4.89		21.66	615.6	0.	27.20	33.65	21.66	615.6	0.000
10.	27.21	33.67	4.61		21.67	614.8	10.	27.21	33.67	21.67	614.8	0.062
20.Δ	25.60	34.03			22.45	541.0	20.	25.60	34.03	22.45	541.0	0.120
30.Δ	21.50	34.47			23.97	395.5	30.	21.50	34.47	23.97	395.5	0.167
51.	17.76	34.68	4.55		25.10	288.4	50.	17.86	34.69	25.08	290.3	0.236
76.	13.26	34.32	3.05		25.83	219.4	75.	13.42	34.34	25.82	221.2	0.301
102.	11.32	34.30	2.24		26.19	185.7	100.	11.40	34.29	26.17	187.7	0.352
127.	10.62	34.45	1.39		26.43	163.2	150.	10.43	34.57	26.56	151.8	0.438
153.	10.42	34.58	0.72		26.57	150.8	200.	9.88	34.60	26.68	141.5	0.512
178.	10.21	34.62	0.40		26.64	144.9	250.	9.06	34.56	26.78	132.2	0.581
192.	10.04	34.61	0.49		26.66	143.1	300.	8.71	34.59	26.87	125.1	0.646
226.	9.35	34.56	0.50		26.74	136.2	400.	7.70	34.56	26.99	114.1	0.766
253.	9.03	34.56	0.49		26.79	131.7	500.	6.87	34.54	27.10	105.4	0.877
279.	8.92	34.60	0.48		26.84	127.5	600.	6.05	34.54	27.20	95.7	0.979
304.	8.66	34.59	0.49		26.87	124.7	700.	5.51	34.55	27.28	89.1	1.072
404.	7.66	34.56	0.71		27.00	113.7	800.	5.11	34.56	27.34	84.3	1.160
507.	6.82	34.54	0.69		27.10	104.8	1000.	4.27	34.57	27.44	75.0	1.321
607.	6.00	34.54	0.85		27.21	95.0	1200.	3.58	34.59	27.52	67.0	1.465
808.	5.08	34.56	0.99		27.34	84.0	1500.	2.92	34.62	27.61	58.8	1.656
1010.	4.23	34.57	1.38		27.44	74.6						
1211.	3.55	34.59	1.65		27.53	66.6						
1511.	2.90	34.62			27.61	58.6						

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 9, STATION 9, 13- ON LAT, 154- 6W LONG, OCT. 6, 1964, 0600 G.C.T.
DRY BULB 26.8 WET BULB 24.0 WIND SPEED 12, DIR. 08 BAR. 15 WEATHER 01 VIS. 8 CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.88	33.67	5.11		21.78	604.4	0.	26.88	33.67	21.78	604.4	0.000
10.	26.84	33.66	5.18		21.78	604.3	10.	26.84	33.66	21.78	604.3	0.061
30.Δ	26.74	33.66			21.81	602.0	20.	26.82	33.65	21.78	604.6	0.122
50.Δ	26.22	33.76			22.05	580.0	30.	26.74	33.66	21.81	602.0	0.183
74.	22.88	34.66	5.59		23.73	420.4	50.	26.22	33.76	22.05	580.0	0.302
98.	20.86	34.90	5.23		24.48	350.2	75.	22.78	34.68	23.77	416.4	0.427
122.	18.67	34.85	4.68		25.01	300.0	100.	20.71	34.91	24.52	345.9	0.523
148.	14.29	34.37	3.91		25.66	238.2	150.	13.98	34.35	25.71	233.7	0.669
171.	11.62	34.27	2.93		26.11	194.9	200.	11.19	34.56	26.42	166.7	0.770
187.	11.38	34.45	1.49		26.30	177.8	250.	10.55	34.68	26.63	147.7	0.849
220.	10.91	34.66	0.48		26.55	154.8	300.	9.85	34.65	26.72	139.4	0.922
245.	10.60	34.68			26.62	148.5	400.	8.81	34.62	26.87	127.0	1.056
271.	10.32	34.68	0.29		26.67	144.3	500.	7.65	34.55	26.99	116.0	1.179
296.	9.90	34.65	0.29		26.72	140.0	600.	6.70	34.53	27.11	105.3	1.290
394.	8.88	34.62	0.40		26.86	127.7	700.	5.92	34.53	27.21	95.8	1.392
494.	7.71	34.55	0.53		26.98	116.7	800.	5.30	34.54	27.30	88.2	1.485
591.	6.78	34.53	0.68		27.10	106.2	1000.	4.48	34.55	27.40	78.8	1.654
789.	5.36	34.54	0.65		27.29	88.8	1200.	3.77	34.58	27.50	69.7	1.805
986.	4.53	34.55	0.99		27.39	79.6						
1173.	3.85	34.59	1.91		27.50	69.9						
1447.	3.09	34.61	1.50		27.59	61.2						

CROMWELL 9, STATION 10, 14-29N LAT, 154- 5W LONG, OCT. 6, 1964, 1500 G.C.T.
DRY BULB 25.6 WET BULB 23.4 WIND SPEED 16, DIR. 07 BAR. 15 WEATHER 02 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	26.48	34.56			22.57	528.3	0.	26.48	34.56	22.57	528.2	0.000
10.	26.46	34.57	4.66		22.59	527.3	10.	26.46	34.57	22.59	527.3	0.053
30.Δ	26.40	34.56			22.60	527.0	20.	26.43	34.57	22.59	527.2	0.106
50.Δ	26.32	34.57			22.63	524.7	30.	26.40	34.56	22.60	527.0	0.159
74.	24.78	34.72	4.94		23.22	469.5	50.	26.32	34.57	22.63	524.7	0.265
99.	22.77	34.94	4.80		23.97	398.1	75.	24.70	34.73	23.25	466.5	0.390
124.	21.46	35.08			24.45	353.8	100.	22.72	34.95	24.00	396.1	0.499
150.	19.34	35.00	4.95		24.95	306.4	150.	19.34	35.00	24.95	306.4	0.676
173.	17.29	34.73	5.23		25.26	277.8	200.	14.65	34.46	25.65	240.6	0.814
188.	15.95	34.59	4.21		25.46	258.4	250.	10.76	34.20	26.21	186.8	0.921
222.	12.42	34.26	3.91		25.95	211.6	300.	9.28	34.20	26.47	162.8	1.010
248.	10.84	34.20	3.54		26.20	188.0	400.	7.84	34.40	26.84	128.4	1.157
273.	10.02	34.19	3.25		26.34	175.4	500.	7.05	34.48	27.03	112.2	1.278
298.	9.32	34.20	2.81		26.46	163.7	600.	6.20	34.49	27.15	101.3	1.386
396.	7.88	34.39	0.92		26.83	129.3	700.	5.53	34.51	27.24	92.5	1.484
494.	7.10	34.48	0.56		27.02	113.0	800.	5.01	34.52	27.32	85.8	1.574
590.	6.28	34.49	0.61		27.14	102.2	1000.	4.28	34.55	27.42	76.4	1.738
784.	5.08	34.52	0.84		27.31	86.7	1200.	3.62	34.58	27.51	68.4	1.885
978.	4.36	34.55	0.98		27.41	77.4						
1173.	3.69	34.57	1.25		27.50	69.4						
1467.	2.90	34.60	1.64		27.60	59.8						

CROMWELL 9, STATION 11, 16- ON LAT, 154- 2W LONG, OCT. 7, 1964, 0000 G.C.T.
DRY BULB 26.1 WET BULB 22.2 WIND SPEED 20, DIR. 07 BAR. 15 WEATHER 01 VIS. 7 CLOUD TYPE 8, COVER 4

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.22	34.59	4.72		22.68	518.3	0.	26.22	34.59	22.68	518.3	0.000
10.Δ	26.12	34.60	4.86		22.72	515.0	10.	26.12	34.60	22.72	515.0	0.052
30.Δ	25.80	34.60			22.82	506.3	20.	25.96	34.60	22.77	510.5	0.104
50.Δ	25.62	34.59			22.86	502.4	30.	25.80	34.60	22.82	506.3	0.155
79.	23.99	34.54	5.01		23.32	460.1	50.	25.62	34.59	22.86	502.4	0.257
101.	22.16	34.84	5.15		24.07	388.9	75.	24.29	34.53	23.22	469.0	0.379
126.	21.24	35.07	4.88		24.50	348.8	100.	22.24	34.82	24.04	392.1	0.487
152.	19.19	34.90	4.38		24.92	310.0	150.	19.39	34.92	24.88	313.1	0.665
177.	16.16	34.57	4.01		25.40	264.1	200.	13.96	34.35	25.71	234.6	0.803
191.	14.91	34.43	3.83		25.57	247.9	250.	10.25	34.19	26.29	179.0	0.907
225.	11.56	34.19	3.67		26.06	201.0	300.	9.35	34.37	26.59	152.0	0.991
252.	10.18	34.19	2.24		26.31	177.6	400.	7.80	34.43	26.87	125.5	1.131
279.	9.40	34.22	2.58		26.46	163.2	500.	6.94	34.47	27.03	111.6	1.250
303.	9.36	34.39	1.30		26.60	150.5	600.	6.07	34.47	27.15	100.9	1.358
403.	7.74	34.42	0.68		26.88	125.2	700.	5.44	34.49	27.24	92.8	1.456
503.	6.92	34.47	0.40		27.03	111.3	800.	4.97	34.51	27.31	86.3	1.546
603.	6.04	34.47	0.53		27.15	100.7	1000.	4.16	34.53	27.42	76.6	1.711
805.	4.95	34.51	0.78		27.31	86.0	1200.	3.53	34.57	27.51	67.8	1.857
1005.	4.14	34.53	1.04		27.42	76.4	1500.	2.87	34.60	27.60	59.7	2.051
1205.	3.52	34.57	1.28		27.51	67.6						
1505.	2.86	34.60	1.64		27.60	59.6						

ΔFROM BT DATA

Table 2.--Continued

CROMWELL 9, STATION 12, 17-28N LAT, 153-59W LONG, CCT. 7, 1964, 0900 G.C.T.
DRY BULB 25.0 WET BULB 22.6 WIND SPEED 18, DIR. 08 BAR. 18 WEATHER 02 VIS. CLOUD TYPE , COVER

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.06	34.45	4.77		22.62	523.6	0.	26.06	34.45	22.62	523.6	0.000
10.	26.08	34.44	4.78		22.61	525.3	10.	26.08	34.44	22.61	525.3	0.053
30.Δ	26.00	34.46			22.65	522.3	20.	26.06	34.44	22.61	525.0	0.106
50.Δ	25.70	34.55			22.81	507.7	30.	26.00	34.46	22.65	522.3	0.158
75.Δ	23.60	34.97			23.76	418.0	50.	25.70	34.55	22.81	507.7	0.262
100.	22.50	35.07	5.10		24.15	381.4	75.	23.60	34.97	23.76	418.0	0.379
126.	21.04	35.05	4.72		24.54	345.0	100.	22.50	35.07	24.15	381.4	0.480
151.	19.90	35.00	4.54		24.81	320.4	150.	19.95	35.00	24.80	321.3	0.657
175.	18.52	34.84	4.27		25.04	298.9	200.	16.56	34.61	25.34	270.7	0.806
201.	16.47	34.60	4.03		25.35	269.6	250.	12.06	34.22	25.99	208.5	0.927
225.	14.39	34.38	3.76		25.64	241.7	300.	10.40	34.26	26.33	177.1	1.024
250.	12.06	34.22	3.61		25.99	208.5	400.	8.66	34.43	26.75	138.2	1.183
275.	10.81	34.21	3.32		26.21	187.4	500.	7.62	34.47	26.94	121.3	1.314
299.	10.42	34.26	2.77		26.32	177.5	600.	6.69	34.48	27.07	108.7	1.430
397.	8.70	34.43	0.87		26.74	138.9	700.	5.87	34.49	27.19	98.1	1.534
495.	7.67	34.47	0.56		26.93	122.0	800.	5.20	34.50	27.28	89.8	1.629
593.	6.75	34.48	0.53		27.06	109.5	1000.	4.33	34.52	27.39	79.3	1.801
788.	5.27	34.50	0.73		27.27	90.6	1200.	3.67	34.55	27.48	70.8	1.952
983.	4.39	34.52	1.14		27.38	80.0						
1181.	3.75	34.55	1.25		27.48	71.7						
1402.	3.15	34.58	1.97		27.56	63.9						

CROMWELL 9, STATION 13, 18-54N LAT, 153-58W LONG, CCT. 7, 1964, 1800 G.C.T.
DRY BULB 24.4 WET BULB 20.1 WIND SPEED 19, DIR. 09 BAR. 18 WEATHER 02 VIS. 8 CLOUD TYPE 5, COVER 9

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.84	34.45	5.28		22.69	517.0	0.	25.84	34.45	22.69	517.0	0.000
10.	26.12	34.45	4.84		22.60	525.8	10.	26.12	34.45	22.60	525.8	0.053
30.Δ	26.04	34.45			22.63	524.2	20.	26.14	34.44	22.59	527.4	0.106
50.Δ	25.80	34.58			22.80	508.5	30.	26.04	34.45	22.63	524.2	0.159
77.	23.83	35.10	5.38		23.79	415.2	50.	25.80	34.58	22.80	508.5	0.263
106.	22.74	35.20	5.18		24.18	378.8	75.	23.99	35.06	23.71	422.5	0.380
127.	21.24	35.17	5.18		24.58	341.6	100.	22.97	35.21	24.12	384.5	0.481
153.	19.94	34.97	4.60		24.77	323.6	150.	20.08	35.00	24.76	325.2	0.660
178.	18.46	34.86	4.39		25.07	296.1	200.	16.82	34.71	25.35	269.7	0.810
192.	17.68	34.81	4.52		25.22	281.7	250.	12.44	34.23	25.92	215.1	0.932
227.	13.79	34.33	4.13		25.73	233.2	300.	10.27	34.17	26.27	182.0	1.033
254.	12.27	34.22	4.46		25.95	212.5	400.	7.80	34.15	26.66	146.0	1.198
280.	11.20	34.18	3.64		26.12	196.5	500.	6.33	34.24	26.93	120.0	1.332
294.	10.50	34.17	3.29		26.24	185.4	600.	5.74	34.35	27.10	105.4	1.446
405.	7.74	34.15	2.44		26.67	145.1	700.	5.26	34.43	27.21	94.7	1.547
506.	6.27	34.25	1.30		26.95	118.7	800.	4.83	34.48	27.30	86.8	1.639
607.	5.72	34.36	0.88		27.10	104.6	1000.	4.14	34.51	27.40	77.9	1.806
809.	4.79	34.48	0.90		27.31	86.2	1200.	3.54	34.57	27.51	68.1	1.954
1011.	4.11	34.51	1.03		27.41	77.6	1500.	2.93	34.59	27.59	61.1	2.150
1211.	3.51	34.57	1.25		27.52	67.6						
1511.	2.91	34.59	1.64		27.59	60.9						

TEMPERATURE ERROR TERM AT 200. METERS IS 0.15

CROMWELL 9, STATION 14, 20-28N LAT, 153-56W LONG, CCT. 8, 1964, 0300 G.C.T.
DRY BULB 25.0 WET BULB 22.2 WIND SPEED 18, DIR. 09 BAR. 17 WEATHER 01 VIS. 8 CLOUD TYPE 8, COVER 1

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.04	34.87	4.91		22.94	492.7	0.	26.04	34.87	22.94	492.7	0.000
9.	26.04	34.87	4.80		22.94	493.1	10.	26.03	34.87	22.95	493.0	0.050
30.Δ	25.86	34.86			22.99	489.3	20.	25.96	34.86	22.97	491.5	0.099
50.Δ	25.72	34.86			23.04	486.0	30.	25.86	34.86	22.99	489.3	0.149
75.Δ	24.20	34.85			23.49	443.6	50.	25.72	34.86	23.04	486.0	0.247
97.	22.58	34.86	5.12		23.97	398.7	75.	24.20	34.85	23.49	443.6	0.364
120.	21.05	34.92	5.85		24.44	354.5	100.	22.37	34.87	24.03	392.6	0.469
145.	19.45	34.91	4.36		24.86	315.5	150.	19.25	34.91	24.91	310.4	0.646
169.	18.42	34.88	4.45		25.09	293.4	200.	16.09	34.58	25.42	262.6	0.791
182.	17.47	34.76	4.26		25.24	280.1	250.	12.94	34.27	25.86	221.7	0.913
215.	15.02	34.45	3.85		25.56	249.4	300.	10.55	34.15	26.21	187.9	1.016
240.	13.67	34.34	4.22		25.76	230.4	400.	8.11	34.15	26.61	150.3	1.187
264.	11.97	34.18	4.14		25.98	210.1	500.	6.65	34.24	26.89	124.5	1.326
288.	10.58	34.16	3.69		26.15	194.3	600.	5.16	34.26	27.09	104.6	1.441
381.	8.39	34.13	2.91		26.55	155.9	700.	4.77	34.37	27.23	92.6	1.541
474.	7.16	34.24	1.30		26.82	131.2	800.	4.60	34.47	27.32	84.7	1.630
566.	5.42	34.23	0.98		27.04	109.9	1000.	3.95	34.52	27.43	74.6	1.792
750.	4.78	34.44	0.76		27.28	88.4	1200.	3.40	34.56	27.52	66.9	1.935
935.	4.14	34.51	0.99		27.40	77.3						
1119.	3.63	34.54	1.18		27.48	70.5						
1374.	3.00	34.58	1.63		27.57	61.9						

TEMPERATURE ERROR TERM AT 700. METERS IS 0.12

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 9, STATION 15, 22- 2N LAT, 153-58W LONG, OCT. 8, 1964, 1300 G.C.T.
DRY BULB 22.8 WET BULB 21.1 WIND SPEED 18, DIR. 10 BAR. 19 WEATHER 02 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.14	35.09	4.88		23.39	450.4	0.	25.14	35.09	23.39	450.4	0.000
9.	25.15	35.09	4.96		23.38	451.0	10.	25.15	35.09	23.39	451.0	0.045
30.Δ	25.06	35.10			23.42	448.5	20.	25.11	35.10	23.40	449.9	0.091
50.Δ	25.04	35.10			23.43	448.8	30.	25.06	35.10	23.42	448.5	0.136
75.Δ	24.70	35.11			23.54	439.2	50.	25.04	35.10	23.43	448.8	0.226
92.	22.98	35.19	5.31		24.10	385.6	75.	24.70	35.11	23.54	439.2	0.338
100.Δ	22.80	35.19			24.16	381.0	100.	22.80	35.19	24.16	381.0	0.442
114.	22.46	35.20	5.10		24.26	371.5	150.	21.64	35.29	24.56	344.6	0.624
137.	21.95	35.26	4.94		24.45	354.3	200.	20.74	35.24	24.77	326.1	0.793
159.	21.45	35.30	4.78		24.62	339.0	250.	17.53	34.80	25.25	280.8	0.946
173.	21.26	35.31	4.76		24.68	333.7	300.	13.64	34.38	25.80	228.3	1.075
204.	20.60	35.22	4.66		24.79	324.2	400.	9.37	34.09	26.37	174.6	1.278
227.	18.99	35.01	4.59		25.05	299.7	500.	7.24	34.10	26.70	143.2	1.438
252.	17.39	34.78	4.53		25.27	279.1	600.	5.99	34.20	26.94	119.8	1.571
274.	15.43	34.56	4.58		25.56	251.9	700.	5.30	34.33	27.13	102.8	1.684
366.	10.47	34.14	4.66		26.22	188.6	800.	4.80	34.41	27.26	91.1	1.782
458.	8.03	34.08	3.34		26.57	155.5	1000.	4.04	34.50	27.41	77.3	1.952
550.	6.49	34.14	1.70		26.83	130.4	1200.	3.49	34.55	27.50	68.6	2.100
735.	5.15	34.37	0.77		27.18	98.1						
921.	4.28	34.47	1.08		27.36	81.8						
1093.	3.81	34.53	1.21		27.45	73.2						
1300.	3.28	34.56	1.40		27.53	66.2						

CROMWELL 9, STATION 16, 23-28N LAT, 154- 2W LONG, OCT. 8, 1964, 2100 G.C.T.
DRY BULB 25.0 WET BULB 22.1 WIND SPEED 14, DIR. 12 BAR. 22 WEATHER 02 VIS. 8 CLOUD TYPE 8, COVER 4

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.34	35.05	4.91		23.30	459.1	0.	25.34	35.05	23.30	459.1	0.000
10.Δ	25.33	35.05	4.84		23.30	459.2	10.	25.33	35.05	23.30	459.2	0.046
30.Δ	25.33	35.05			23.30	460.0	20.	25.33	35.05	23.30	459.6	0.093
50.Δ	25.33	35.05			23.30	460.8	30.	25.33	35.05	23.30	460.0	0.139
75.Δ	24.70	35.07			23.51	442.1	50.	25.33	35.05	23.30	460.8	0.232
101.	22.24	35.16	4.86		24.29	368.0	75.	24.70	35.07	23.51	442.1	0.345
125.	21.35	35.18	4.88		24.55	343.7	100.	22.34	35.16	24.26	370.8	0.448
153.	20.15	35.07	4.59		24.79	321.7	150.	20.30	35.09	24.77	324.1	0.623
177.	18.71	34.94	4.48		25.07	296.3	200.	17.58	34.81	25.25	279.5	0.775
192.	18.06	34.87	4.41		25.18	286.3	250.	14.18	34.42	25.72	235.3	0.905
226.	15.82	34.60	4.46		25.50	256.0	300.	11.80	34.19	26.02	207.3	1.016
253.	14.00	34.40	4.92		25.74	233.0	400.	9.17	34.08	26.39	172.2	1.208
279.	13.17	34.36	4.88		25.88	220.1	500.	6.84	34.02	26.69	143.2	1.367
303.	11.59	34.16	4.94		26.03	205.5	600.	5.48	34.11	26.94	119.9	1.500
405.	9.13	34.09	4.72		26.41	170.9	700.	4.77	34.24	27.12	102.5	1.612
506.	6.71	34.02	2.91		26.71	141.7	800.	4.38	34.36	27.26	89.8	1.710
606.	5.43	34.12	1.33		26.95	118.7	1000.	3.90	34.50	27.42	76.0	1.877
807.	4.36	34.37	0.67		27.27	89.1	1200.	3.37	34.55	27.52	66.9	2.022
1008.	3.89	34.50	1.12		27.42	75.6						
1169.	3.41	34.54	1.39		27.50	68.2						
1382.	2.93	34.57	1.81		27.57	61.8						

CROMWELL 9, STATION 17, 23-26N LAT, 151- 6W LONG, OCT. 9, 1964, 1300 G.C.T.
DRY BULB 23.8 WET BULB 21.1 WIND SPEED 22, DIR. 35 BAR. 21 WEATHER 02 VIS. 8 CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.34	35.32			23.80	410.8	0.	24.34	35.32	23.80	410.8	0.000
11.	24.34	35.33			23.81	410.5	10.	24.34	35.33	23.81	410.5	0.041
30.Δ	24.34	35.32			23.80	412.0	20.	24.34	35.33	23.81	411.1	0.083
50.Δ	24.34	35.32			23.80	412.8	30.	24.34	35.32	23.80	412.0	0.124
74.	21.99	35.26			24.44	353.0	50.	24.34	35.32	23.80	412.8	0.207
98.	20.98	35.27			24.72	326.6	75.	21.93	35.26	24.45	351.4	0.304
122.	20.48	35.24			24.84	316.7	100.	20.93	35.27	24.74	325.5	0.389
146.	19.98	35.23			24.96	305.6	150.	19.87	35.22	24.98	303.9	0.547
170.	19.03	35.08			25.09	293.7	200.	17.01	34.75	25.34	271.1	0.692
184.	18.08	34.91			25.20	283.6	250.	13.78	34.38	25.77	230.0	0.819
217.	15.89	34.60			25.48	257.2	300.	11.49	34.23	26.10	198.9	0.927
243.	14.16	34.41			25.72	235.3	400.	8.81	34.07	26.44	166.9	1.111
267.	12.93	34.32			25.90	218.1	500.	6.62	34.05	26.74	138.1	1.265
290.	11.85	34.25			26.05	203.4	600.	5.35	34.16	26.99	114.8	1.393
385.	9.20	34.09			26.39	171.6	700.	4.76	34.28	27.15	99.6	1.501
482.	6.94	34.04			26.69	143.0	800.	4.48	34.39	27.27	89.3	1.597
578.	5.53	34.13			26.95	118.9	1000.	3.96	34.50	27.42	76.1	1.764
770.	4.58	34.36			27.24	92.1	1200.	3.46	34.56	27.52	67.3	1.909
962.	4.06	34.49			27.40	78.0						
1148.	3.58	34.54			27.48	70.1						
1423.	2.94	34.58			27.58	61.5						

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 9, STATION 18, 22- ON LAT, 151- OW LONG, OCT. 9, 1964, 2200 G.C.T.
DRY BULB 25.0 WET BULB 22.0 WIND SPEED 18, DIR. 07 BAR. 21 WEATHER 01 VIS. 7 CLOUD TYPE 8, COVER 4

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.58	34.93			23.13	474.8	0.	25.58	34.93	23.13	474.8	0.000
10.	25.51	34.93			23.15	473.1	10.	25.51	34.93	23.15	473.1	0.048
30.Δ	25.51	34.93			23.15	473.9	20.	25.50	34.93	23.16	473.2	0.095
50.Δ	25.51	34.93			23.15	474.7	30.	25.51	34.93	23.15	473.9	0.143
77.	23.31	35.17			23.99	395.6	50.	25.51	34.93	23.15	474.7	0.239
102.	22.04	35.19			24.37	360.5	75.	23.50	35.15	23.92	402.2	0.349
127.	21.33	35.24			24.61	338.9	100.	22.12	35.19	24.35	362.4	0.445
153.	20.51	35.22			24.81	320.0	150.	20.62	35.23	24.79	322.2	0.618
177.	19.20	35.04			25.02	301.0	200.	18.28	34.92	25.16	288.3	0.772
193.	18.75	34.99			25.10	294.2	250.	14.50	34.42	25.65	241.9	0.905
226.	16.18	34.61			25.43	263.2	300.	11.89	34.16	25.98	210.8	1.020
254.	14.24	34.39			25.68	238.7	400.	8.34	34.08	26.52	159.4	1.206
279.	12.81	34.24			25.86	221.9	500.	6.30	34.06	26.79	133.2	1.354
304.	11.73	34.15			26.00	208.8	600.	5.13	34.18	27.03	110.4	1.477
404.	8.23	34.08			26.54	157.6	700.	4.60	34.30	27.19	96.3	1.582
507.	6.20	34.06			26.81	131.8	800.	4.38	34.39	27.29	87.5	1.674
607.	5.07	34.19			27.05	109.0	1000.	3.86	34.51	27.43	74.8	1.839
808.	4.37	34.40			27.29	87.0	1200.	3.35	34.55	27.52	67.0	1.982
1010.	3.84	34.51			27.43	74.3						
1202.	3.34	34.55			27.52	66.9						
1437.	2.81	34.58			27.59	60.0						

CROMWELL 9, STATION 19, 20-26N LAT, 150-59W LONG, OCT. 10, 1964, 0800 G.C.T.
DRY BULB 24.6 WET BULB 21.8 WIND SPEED 18, DIR. 07 BAR. 19 WEATHER 02 VIS. 7 CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	25.86	34.84			22.98	489.6	0.	25.86	34.84	22.98	489.6	0.000
11.	25.84	34.84			22.98	489.4	10.	25.84	34.84	22.98	489.4	0.049
30.Δ	25.82	34.84			22.99	489.6	20.	25.83	34.84	22.99	489.4	0.099
50.Δ	25.80	34.84			23.00	489.8	30.	25.82	34.84	22.99	489.6	0.148
74.	24.51	34.90			23.43	448.8	50.	25.80	34.84	23.00	489.8	0.247
98.	23.14	35.07			23.97	398.9	75.	24.45	34.91	23.46	446.5	0.364
122.	22.48	35.13			24.20	377.4	100.	23.08	35.08	23.99	396.8	0.471
147.	21.47	35.26			24.58	341.9	150.	21.33	35.25	24.61	339.1	0.656
171.	20.32	35.14			24.80	321.6	200.	18.96	35.01	25.06	298.0	0.817
185.	19.65	35.10			24.95	308.1	250.	15.39	34.52	25.54	252.9	0.956
218.	17.96	34.86			25.19	285.5	300.	11.83	34.18	26.01	208.2	1.072
244.	15.83	34.58			25.48	258.2	400.	8.51	34.11	26.52	159.8	1.257
269.	14.03	34.37			25.71	236.3	500.	6.94	34.23	26.84	129.1	1.403
293.	12.22	34.21			25.95	213.2	600.	6.01	34.33	27.05	110.4	1.524
391.	8.71	34.10			26.48	163.2	700.	5.43	34.41	27.18	98.1	1.630
489.	7.07	34.22			26.82	131.7	800.	5.01	34.47	27.27	89.8	1.725
586.	6.11	34.32			27.02	112.5	1000.	4.22	34.51	27.40	78.6	1.895
782.	5.09	34.46			27.26	91.2	1200.	3.62	34.55	27.49	70.6	2.046
979.	4.29	34.51			27.39	79.5						
1169.	3.74	34.54			27.47	72.2						
1428.	3.09	34.57			27.56	64.0						

CROMWELL 9, STATION 20, 18-54N LAT, 150-58W LONG, OCT. 10, 1964, 1700 G.C.T.
DRY BULB 22.4 WET BULB 21.1 WIND SPEED 20, DIR. 07 BAR. 17 WEATHER 21 VIS. 7 CLOUD TYPE 8, COVER 7

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.51	34.72			23.00	487.9	0.	25.51	34.72	23.00	487.9	0.000
11.	25.54	34.72			22.99	489.2	10.	25.54	34.72	22.99	489.1	0.049
30.Δ	25.54	34.72			22.99	489.9	20.	25.55	34.72	22.98	489.7	0.098
50.Δ	25.52	34.72			22.99	490.1	30.	25.54	34.72	22.99	489.9	0.148
75.Δ	25.50	34.72			23.00	490.6	50.	25.52	34.72	22.99	490.1	0.247
103.	22.89	35.07			24.04	392.2	75.	25.50	34.72	23.00	490.6	0.370
129.	21.86	35.22			24.44	354.5	100.	23.20	35.03	23.92	403.6	0.483
154.	21.05	35.24			24.68	332.6	150.	21.17	35.24	24.65	335.5	0.669
181.	20.15	35.18			24.88	314.8	200.	19.34	35.07	25.01	303.1	0.830
212.	18.61	34.96			25.11	293.6	250.	14.75	34.44	25.61	245.6	0.968
231.	16.83	34.71			25.35	270.6	300.	11.75	34.19	26.03	206.1	1.082
258.	13.95	34.34			25.71	236.5	400.	9.33	34.39	26.61	151.9	1.263
284.	12.58	34.23			25.90	218.4	500.	7.75	34.40	26.86	128.4	1.404
309.	11.32	34.18			26.10	199.4	600.	6.52	34.38	27.02	113.8	1.526
412.	9.22	34.43			26.66	147.4	700.	5.72	34.41	27.14	102.3	1.636
512.	7.58	34.39			26.88	126.8	800.	5.17	34.45	27.24	93.1	1.734
614.	6.38	34.38			27.04	112.1	1000.	4.39	34.52	27.38	80.5	1.910
817.	5.10	34.46			27.26	91.7	1200.	3.77	34.56	27.48	71.6	2.064
1016.	4.34	34.52			27.39	79.7	1500.	2.97	34.59	27.58	61.7	2.267
1218.	3.72	34.56			27.49	70.9						
1519.	2.93	34.59			27.59	61.2						

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 9, STATION 21, 17-29N LAT, 150-57W LONG, OCT. 11, 1964, 0200 G.C.T.
DRY BULB 24.9 WET BULB 22.8 WIND SPEED 18, DIR. 05 BAR. 15 WEATHER 03 VIS. 8 CLOUD TYPE 9, COVER 5

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.94	34.65			22.81	505.6	0.	25.94	34.65	22.81	505.6	0.000
11.	25.77	34.65			22.86	501.0	10.	25.78	34.65	22.86	501.4	0.051
50.Δ	25.56	34.70			22.96	492.8	20.	25.70	34.65	22.89	498.8	0.101
78.	25.38	34.78			23.08	482.8	30.	25.63	34.67	22.92	496.6	0.151
98.	23.27	34.68			23.63	430.6	50.	25.56	34.70	22.96	492.8	0.251
127.	21.88	35.00			24.27	370.8	75.	25.48	34.78	23.05	485.8	0.374
154.	20.02	34.84			24.65	335.1	100.	23.15	34.70	23.68	425.9	0.489
179.	17.61	34.63			25.10	292.7	150.	20.34	34.88	24.60	340.1	0.682
194.	16.50	34.59			25.34	270.7	200.	15.96	34.54	25.42	262.9	0.834
228.	13.41	34.29			25.78	228.6	250.	11.65	34.24	26.08	199.9	0.951
254.	11.41	34.24			26.13	195.3	300.	10.69	34.49	26.45	165.2	1.043
280.	11.05	34.38			26.30	179.2	400.	8.90	34.49	26.75	138.0	1.196
306.	10.57	34.52			26.50	161.1	500.	7.95	34.49	26.90	124.9	1.328
406.	8.81	34.47			26.75	137.8	600.	6.80	34.46	27.04	111.6	1.448
508.	7.89	34.49			26.91	124.0	700.	5.97	34.46	27.15	101.7	1.556
609.	6.70	34.46			27.06	110.5	800.	5.40	34.48	27.24	94.1	1.655
811.	5.35	34.48			27.24	93.4	1000.	4.56	34.51	27.36	83.2	1.834
1012.	4.52	34.51			27.36	82.7	1200.	3.81	34.55	27.47	72.8	1.992
1212.	3.77	34.55			27.47	72.2	1500.	3.03	34.59	27.58	62.4	2.198
1514.	3.00	34.59			27.58	62.1	2000.	2.20	34.64	27.69	51.3	2.487
2011.	2.19	34.64			27.69	51.2	2500.	1.83	34.67	27.74	46.5	2.736
2511.	1.83	34.67			27.74	46.4	3000.	1.63	34.69	27.77	43.8	2.966
2909.	1.66	34.69			27.77	44.1	4000.	1.48	34.70	27.79	43.9	3.416
4007.	1.48	34.70			27.79	43.9						
4999.	1.44	34.71			27.80	45.0						

CROMWELL 9, STATION 22, 15-59N LAT, 151- 2W LONG, OCT. 11, 1964, 1200 G.C.T.
DRY BULB 24.4 WET BULB 21.8 WIND SPEED 02, DIR. 09 BAR. 17 WEATHER 01 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.09	34.22			22.44	541.0	0.	26.09	34.22	22.44	541.0	0.000
9.	26.08	34.22			22.44	541.1	10.	26.07	34.22	22.45	540.7	0.054
30.Δ	25.78	34.28			22.58	528.7	20.	25.95	34.24	22.50	535.9	0.109
50.Δ	25.42	34.36			22.75	513.1	30.	25.78	34.28	22.58	528.7	0.162
67.Δ	23.80	34.75			23.53	439.2	50.	25.42	34.36	22.75	513.1	0.267
75.Δ	22.70	34.96			24.01	393.9	75.	22.70	34.96	24.01	393.9	0.382
91.	21.86	35.06			24.32	364.6	100.	21.32	35.09	24.50	348.4	0.475
113.	20.39	35.08			24.74	325.7	150.	16.30	34.60	25.39	264.2	0.629
135.	18.26	34.85			25.11	290.6	200.	11.89	34.54	26.27	180.9	0.742
156.	15.48	34.50			25.50	253.8	250.	11.05	34.70	26.55	154.9	0.826
170.	13.72	34.32			25.74	231.0	300.	10.51	34.70	26.65	147.0	0.902
199.	11.92	34.53			26.26	181.9	400.	9.43	34.65	26.79	134.6	1.044
223.	11.48	34.68			26.46	163.5	500.	8.27	34.58	26.93	122.7	1.174
245.	11.12	34.70			26.54	156.2	600.	7.31	34.54	27.03	113.5	1.294
267.	10.82	34.70			26.59	151.4	700.	6.47	34.51	27.13	105.0	1.404
352.	10.06	34.68			26.71	141.7	800.	5.83	34.51	27.21	97.4	1.506
439.	8.91	34.62			26.86	129.0	1000.	4.77	34.53	27.35	84.1	1.690
526.	8.02	34.57			26.95	120.4	1200.	3.93	34.55	27.46	73.8	1.850
699.	6.48	34.51			27.12	105.1						
875.	5.42	34.52			27.27	92.1						
1054.	4.52	34.54			27.35	80.9						
1332.	3.50	34.57			27.52	68.4						

CROMWELL 9, STATION 23, 14-36N LAT, 151- 1W LONG, OCT. 11, 1964, 2000 G.C.T.
DRY BULB 25.3 WET BULB 23.9 WIND SPEED 10, DIR. 04 BAR. 17 WEATHER 03 VIS. 7 CLOUD TYPE 6, COVER 6

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.50	33.95			22.11	572.7	0.	26.50	33.95	22.11	572.7	0.000
10.Δ	26.42	33.95			22.13	570.7	10.	26.42	33.95	22.13	570.7	0.058
30.Δ	26.40	33.95			22.14	570.9	20.	26.40	33.95	22.14	570.6	0.115
50.Δ	26.30	33.95			22.17	568.7	30.	26.40	33.95	22.14	570.9	0.173
76.	18.63	34.43			24.70	327.9	50.	26.30	33.95	22.17	568.7	0.287
101.	13.77	34.37			25.77	226.4	75.	18.98	34.41	24.60	337.6	0.402
127.	11.65	34.28			26.12	193.7	100.	13.91	34.38	25.74	228.7	0.473
152.	10.71	34.40			26.38	168.9	150.	10.75	34.39	26.36	170.6	0.573
177.	10.37	34.47			26.49	158.6	200.	10.33	34.57	26.58	150.8	0.654
192.	10.38	34.56			26.56	152.4	250.	9.43	34.51	26.69	141.4	0.728
226.	9.97	34.55			26.63	147.0	300.	8.80	34.52	26.80	131.7	0.797
253.	9.36	34.51			26.70	140.6	400.	7.65	34.49	26.95	118.6	0.923
279.	9.05	34.53			26.76	134.7	500.	6.78	34.50	27.07	107.2	1.037
304.	8.75	34.52			26.80	131.3	600.	6.00	34.50	27.18	97.9	1.141
405.	7.60	34.49			26.95	118.0	700.	5.44	34.51	27.25	91.2	1.236
507.	6.73	34.50			27.08	106.5	800.	5.01	34.52	27.31	86.0	1.326
607.	5.95	34.50			27.19	97.3	1000.	4.24	34.54	27.42	76.9	1.491
808.	4.98	34.52			27.32	85.6	1200.	3.55	34.58	27.52	67.4	1.637
1010.	4.20	34.54			27.42	76.5	1500.	2.86	34.61	27.61	58.9	1.829
1210.	3.52	34.58			27.52	66.9						
1512.	2.84	34.61			27.61	58.6						

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 9, STATION 24, 12-59N LAT, 150-59W LONG, OCT. 12, 1964, 0600 G.C.T.
DRY BULB 26.1 WET BULB 23.3 WIND SPEED 05, DIR. 06 BAR. 16 WEATHER 02 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
C.	26.47	34.14			22.26	558.2	0.	26.47	34.14	22.26	558.2	0.000
10.	26.39	34.29			22.40	545.4	10.	26.39	34.29	22.40	545.4	0.056
30.Δ	26.26	34.37			22.50	536.5	20.	26.34	34.34	22.45	540.7	0.110
50.	25.81	34.57			22.79	509.5	30.	26.26	34.37	22.50	536.5	0.165
75.	21.01	34.72			24.30	366.2	50.	25.81	34.57	22.79	509.5	0.270
99.	17.95	34.79			25.14	286.4	75.	21.01	34.72	24.30	366.2	0.380
124.	15.10	34.46			25.55	247.7	100.	17.84	34.78	25.16	284.6	0.462
148.	11.96	34.28			26.06	199.8	150.	11.77	34.27	26.08	197.2	0.584
172.	10.59	34.30			26.32	174.7	200.	10.82	34.63	26.54	155.1	0.672
186.	10.72	34.52			26.47	161.0	250.	10.39	34.69	26.66	144.5	0.748
219.	10.82	34.68			26.58	151.8	300.	9.59	34.65	26.76	135.3	0.818
245.	10.46	34.69			26.65	145.4	400.	8.14	34.57	26.93	120.2	0.947
271.	10.08	34.67			26.70	141.0	500.	7.15	34.54	27.06	109.3	1.063
295.	9.67	34.65			26.75	136.2	600.	6.30	34.54	27.17	99.0	1.168
393.	8.22	34.57			26.92	121.1	700.	5.62	34.54	27.26	91.3	1.265
492.	7.22	34.54			27.05	110.2	800.	5.08	34.54	27.32	85.2	1.354
591.	6.37	34.54			27.16	99.8	1000.	4.26	34.56	27.43	75.5	1.516
787.	5.14	34.54			27.32	86.0	1200.	3.64	34.59	27.52	67.7	1.662
984.	4.32	34.56			27.42	76.2						
1180.	3.71	34.59			27.51	68.3						
1478.	3.02	34.61			27.59	60.6						

CROMWELL 9, STATION 25, 11-27N LAT, 150-54W LONG, OCT. 12, 1964, 1600 G.C.T.
DRY BULB 25.8 WET BULB 23.8 WIND SPEED 12, DIR. 05 BAR. 15 WEATHER 01 VIS. 8 CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.89	33.65			21.76	606.1	0.	26.89	33.65	21.76	606.1	0.000
10.Δ	26.84	33.66			21.78	604.3	10.	26.84	33.66	21.78	604.3	0.061
20.Δ	26.80	33.68			21.81	602.0	20.	26.80	33.68	21.81	602.0	0.122
30.Δ	26.60	33.71			21.90	594.2	30.	26.60	33.71	21.90	594.2	0.182
50.Δ	20.50	34.13			23.99	394.9	50.	20.50	34.13	23.99	394.9	0.282
77.	13.62	34.34			25.78	225.0	75.	14.02	34.33	25.69	233.4	0.361
102.	11.44	34.37			26.22	182.7	100.	11.51	34.37	26.21	184.0	0.413
127.	11.17	34.54			26.41	166.0	150.	11.03	34.66	26.52	155.4	0.499
153.	11.01	34.67			26.54	154.3	200.	10.46	34.72	26.67	142.5	0.574
178.	10.66	34.70			26.62	146.6	250.	10.09	34.70	26.72	138.7	0.645
193.	10.57	34.72			26.65	143.9	300.	9.40	34.66	26.81	131.0	0.713
226.	10.09	34.69			26.71	138.7	400.	8.60	34.62	26.91	123.2	0.841
254.	10.09	34.70			26.72	138.6	500.	7.61	34.56	27.01	114.3	0.961
280.	9.63	34.67			26.78	133.8	600.	6.70	34.55	27.13	103.7	1.071
305.	9.35	34.66			26.82	130.5	700.	5.98	34.55	27.22	95.5	1.172
406.	8.56	34.62			26.91	122.9	800.	5.41	34.55	27.29	88.9	1.265
508.	7.53	34.56			27.02	113.5	1000.	4.45	34.56	27.41	78.1	1.434
609.	6.62	34.55			27.14	102.8	1200.	3.80	34.58	27.49	70.3	1.584
810.	5.36	34.55			27.30	88.4	1500.	3.05	34.61	27.59	61.2	1.784
1011.	4.41	34.56			27.41	77.6	2000.	2.28	34.65	27.69	51.6	2.071
1213.	3.76	34.58			27.50	69.9	2500.	1.90	34.67	27.74	47.4	2.323
1511.	3.03	34.61			27.59	60.9	3000.	1.73	34.68	27.76	46.1	2.561
2010.	2.27	34.65			27.69	51.4	4000.	1.46	34.70	27.79	43.6	3.021
2509.	1.90	34.67			27.74	47.3						
3006.	1.73	34.68			27.76	46.1						
4003.	1.46	34.70			27.79	43.6						

CROMWELL 9, STATION 26, 10- 1N LAT, 148- 2W LONG, OCT. 13, 1964, 1100 G.C.T.
DRY BULB 26.0 WET BULB 24.0 WIND SPEED 12, DIR. 09 BAR. 15 WEATHER 01 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
C.	26.58	33.14	4.92		21.47	633.5	0.	26.58	33.14	21.47	633.5	0.000
9.Δ	26.61	33.14	4.69		21.46	634.7	10.	26.44	33.18	21.55	626.7	0.063
30.Δ	21.70	34.25			23.75	416.6	20.	24.41	33.67	22.54	532.6	0.122
48.	18.34	34.66	4.29		24.95	303.4	30.	21.70	34.25	23.75	416.6	0.170
72.	13.75	34.36	2.91		25.76	226.0	50.	17.90	34.64	25.04	294.2	0.241
96.	12.29	34.55	0.83		26.20	184.7	75.	13.46	34.37	25.83	219.5	0.306
118.	11.72	34.69	0.39		26.42	164.6	100.	12.16	34.58	26.25	180.2	0.356
142.	11.11	34.74	0.27		26.57	150.6	150.	10.97	34.74	26.60	148.5	0.439
165.	10.77	34.73	0.42		26.63	146.0	200.	10.43	34.73	26.69	140.8	0.512
179.	10.62	34.73	0.43		26.65	143.7	250.	9.95	34.71	26.76	135.1	0.582
211.	10.33	34.73	0.40		26.70	139.5	300.	9.52	34.69	26.81	130.6	0.649
236.	10.09	34.72	0.36		26.74	136.7	400.	8.94	34.66	26.88	125.5	0.778
259.	9.86	34.71	0.43		26.77	134.1	500.	8.27	34.63	26.96	119.5	0.902
283.	9.64	34.70	0.56		26.80	131.8	600.	7.47	34.59	27.05	112.2	1.019
377.	9.08	34.67	0.59		26.87	126.8	700.	6.57	34.56	27.15	102.8	1.127
471.	8.47	34.64	0.79		26.94	121.2	800.	5.81	34.55	27.24	94.3	1.227
564.	7.80	34.60	0.47		27.01	115.5	1000.	4.80	34.57	27.38	82.0	1.405
753.	6.11	34.55	0.58		27.20	97.7	1200.	3.99	34.58	27.48	72.5	1.562
942.	5.07	34.56	0.99		27.34	85.3						
1132.	4.25	34.58	1.33		27.45	75.3						
1377.	3.44	34.59	1.68		27.54	66.5						

TEMPERATURE ERROR TERM AT 2C. METERS IS 0.33
SALINITY ERROR TERM AT 2C. METERS IS 0.09

ΔFROM BT DATA

Table 2.--Continued

CROMWELL 9, STATION 27, 11-28N LAT, 147-59W LONG, OCT. 13, 1964, 2000 G.C.T.
DRY BULB 26.0 WET BULB 24.1 WIND SPEED 16, DIR. 07 BAR. 16 WEATHER 02 VIS. 8 CLOUD TYPE 8, COVER 3

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.81	33.31	4.70		21.53	628.2	0.	26.81	33.31	21.53	628.2	0.000
10.	26.81	33.31	4.79		21.53	628.6	10.	26.81	33.31	21.53	628.6	0.063
20.Δ	26.74	33.31			21.55	626.8	20.	26.74	33.31	21.55	626.8	0.127
30.Δ	24.60	33.30			22.20	565.0	30.	24.60	33.30	22.20	565.0	0.187
51.	16.85	33.43	3.55		24.37	358.6	50.	17.22	33.41	24.27	368.1	0.281
77.	12.99	34.55	0.87		26.07	197.4	75.	13.12	34.46	25.97	206.4	0.353
102.	11.99	34.75	0.27		26.42	164.7	100.	12.01	34.75	26.41	164.8	0.400
126.	11.53	34.77	0.27		26.52	155.5	150.	11.18	34.76	26.58	150.4	0.479
153.	11.14	34.76	0.30		26.58	149.9	200.	10.60	34.73	26.65	144.1	0.553
178.	10.89	34.75	0.40		26.62	146.9	250.	10.18	34.72	26.72	138.4	0.624
193.	10.68	34.73	0.53		26.64	145.1	300.	9.78	34.71	26.78	133.7	0.693
226.	10.37	34.73	0.59		26.70	140.5	400.	9.17	34.67	26.85	128.5	0.825
254.	10.15	34.72	0.58		26.73	138.1	500.	8.25	34.62	26.96	119.6	0.951
279.	9.94	34.71	0.47		26.76	135.9	600.	7.26	34.57	27.07	110.0	1.067
304.	9.75	34.71	0.49		26.79	133.3	700.	6.41	34.55	27.17	100.9	1.173
405.	9.14	34.67	0.34		26.86	128.3	800.	5.71	34.55	27.25	92.9	1.271
506.	8.19	34.62	0.44		26.97	119.0	1000.	4.78	34.56	27.37	82.2	1.448
607.	7.19	34.57	0.42		27.07	109.4	1200.	4.10	34.58	27.46	74.1	1.607
808.	5.66	34.55	0.84		27.26	92.3	1500.	3.29	34.61	27.57	64.2	1.817
1010.	4.74	34.56	1.00		27.38	81.8						
1211.	4.07	34.58	1.33		27.47	73.7						
1511.	3.27	34.61	1.68		27.57	63.9						

CROMWELL 9, STATION 28, 12-58N LAT, 147-59W LONG, OCT. 14, 1964, 0500 G.C.T.
DRY BULB 26.1 WET BULB 23.7 WIND SPEED 19, DIR. 07 BAR. 16 WEATHER 02 VIS. 7 CLOUD TYPE 8, COVER 2

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.55	33.66	4.87		21.87	595.1	0.	26.55	33.66	21.87	595.1	0.000
10.	26.57	33.66	4.84		21.87	596.1	10.	26.57	33.66	21.87	596.1	0.060
20.Δ	26.50	33.66			21.89	594.4	20.	26.50	33.66	21.89	594.4	0.120
30.Δ	26.00	33.77			22.13	571.9	30.	26.00	33.77	22.13	571.9	0.179
50.	19.69	34.60	4.74		24.56	340.6	50.	19.69	34.60	24.56	340.6	0.271
77.	15.23	34.45	3.90		25.52	249.8	75.	15.46	34.49	25.49	252.1	0.345
100.	12.16	34.33	2.04		26.06	198.6	100.	12.16	34.33	26.06	198.6	0.402
124.	11.58	34.57	0.57		26.35	171.0	150.	11.36	34.73	26.52	156.0	0.491
150.	11.36	34.73	0.35		26.52	156.0	200.	10.59	34.71	26.64	145.4	0.567
174.	10.91	34.72	0.37		26.59	149.3	250.	10.02	34.69	26.73	138.1	0.639
189.	10.72	34.71	0.28		26.62	147.1	300.	9.41	34.65	26.80	132.1	0.707
222.	10.33	34.70	0.26		26.68	141.9	400.	8.54	34.62	26.91	122.5	0.835
248.	10.04	34.69	0.33		26.72	138.4	500.	7.74	34.59	27.01	114.4	0.955
274.	9.76	34.68	0.32		26.76	135.0	600.	6.83	34.56	27.12	104.9	1.066
298.	9.43	34.65	0.36		26.79	132.3	700.	6.09	34.54	27.20	97.2	1.168
396.	8.57	34.62	0.33		26.91	122.8	800.	5.51	34.54	27.27	90.9	1.263
496.	7.78	34.59	0.41		27.01	114.8	1000.	4.73	34.56	27.38	81.5	1.437
595.	6.87	34.56	0.58		27.11	105.3	1200.	3.96	34.58	27.48	72.4	1.593
793.	5.54	34.54*	0.79		27.27	91.3						
993.	4.76	34.56	1.06		27.38	81.9						
1190.	3.98	34.58	2.23		27.48	72.4						
1380.	3.34	34.59	1.82		27.55	65.3						

CROMWELL 9, STATION 29, 14-29N LAT, 147-58W LONG, OCT. 14, 1964, 1400 G.C.T.
DRY BULB 25.6 WET BULB 22.4 WIND SPEED 20, DIR. 06 BAR. 16 WEATHER 02 VIS. 8 CLOUD TYPE , COVER

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	26.36	33.78	4.88		22.02	580.8	0.	26.36	33.78	22.02	580.8	0.000
11.Δ	26.37	33.78	4.91		22.02	581.5	10.	26.37	33.78	22.02	581.5	0.059
30.Δ	26.26	33.78			22.06	579.0	20.	26.53	33.74	21.94	589.5	0.118
52.	22.00	34.52	4.84		23.87	405.9	30.	26.26	33.78	22.06	579.0	0.176
78.	18.45	34.68	4.60		24.93	305.5	50.	22.46	34.45	23.69	423.3	0.277
103.	14.88	34.38	3.29		25.54	248.3	75.	18.82	34.69	24.85	313.4	0.370
128.	12.22	34.20	3.50		25.95	209.9	100.	15.29	34.42	25.48	253.6	0.442
154.	10.86	34.27	2.47		26.25	181.1	150.	11.00	34.25	26.21	185.0	0.552
179.	10.34	34.41	1.54		26.45	162.5	200.	10.23	34.52	26.56	152.7	0.637
194.	10.30	34.51	1.00		26.54	154.8	250.	9.94	34.63	26.69	141.6	0.711
228.	9.91	34.55	0.65		26.64	146.1	300.	9.30	34.61	26.78	133.4	0.781
255.	9.95	34.64	0.30		26.70	140.7	400.	8.29	34.57	26.91	122.2	0.910
273.*	9.80*	34.64	0.28		26.72	138.6	500.	7.32	34.54	27.03	112.0	1.028
281.	9.65	34.63	0.33		26.74	137.0	600.	6.43	34.53	27.15	101.6	1.136
306.	9.19	34.60	0.37		26.79	132.3	700.	5.72	34.51	27.22	94.6	1.235
406.	8.25	34.57	0.39		26.92	121.8	800.	5.13	34.52	27.30	87.6	1.327
508.	7.23	34.54	0.41		27.05	110.6	1000.	4.34	34.55	27.41	77.5	1.494
516.*	7.13	34.55	0.53		27.07	108.6	1200.	3.70	34.58	27.50	69.0	1.642
608.	6.38	34.52	0.58		27.15	101.6						
811.	5.07	34.52	0.83		27.31	86.8						
1012.	4.30	34.55	1.08		27.42	77.0						
1200.**	3.70**	34.58**			27.50	69.0						

TEMPERATURE ERROR TERM AT 20. METERS IS 0.13

ΔFROM BT DATA
*INTERPOLATED DATA
**EXTRAPOLATED DATA

Table 2.--Continued

CROMWELL 9, STATION 30, 16- ON LAT, 147-57W LONG, OCT. 14, 1964, 2300 G.C.T.
DRY BULB 24.8 WET BULB 21.9 WIND SPEED 17, DIR. 08 BAR. 17 WEATHER 02 VIS. 8 CLOUD TYPE 8, COVER 4

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.29	33.84	4.82		22.09	574.4	0.	26.29	33.84	22.09	574.4	0.000
9.Δ	26.25	33.84	4.84		22.10	573.5	10.	26.25	33.84	22.10	573.5	0.058
20.Δ	26.23	33.84			22.11	573.4	20.	26.23	33.84	22.11	573.4	0.116
30.Δ	26.20	33.85			22.13	572.1	30.	26.20	33.85	22.13	572.1	0.173
50.Δ	23.80	34.28			23.18	472.4	50.	23.80	34.28	23.18	472.4	0.278
71.	20.27	34.72	5.12		24.50	347.1	75.	19.58	34.70	24.66	331.3	0.380
93.	16.66	34.48	3.96		25.21	279.2	100.	15.69	34.42	25.39	262.7	0.455
117.	13.77	34.31	3.18		25.72	231.3	150.	11.89	34.32	26.10	195.6	0.570
141.	12.27	34.30	1.94		26.01	203.8	200.	11.12	34.62	26.47	161.2	0.660
164.	11.49	34.40	1.74		26.24	182.9	250.	9.44	34.42	26.62	148.2	0.738
176.	11.33	34.54	0.83		26.38	170.0	300.	9.39	34.55	26.72	138.9	0.810
207.	11.00	34.60	0.74		26.48	160.5	400.	8.11	34.50	26.88	124.8	0.943
232.	9.97	34.48	0.88		26.57	152.3	500.	6.90	34.45	27.02	112.7	1.063
255.	9.35	34.42	1.11		26.63	147.1	600.	6.07	34.47	27.14	101.2	1.171
278.	9.50	34.52	0.44		26.68	142.6	700.	5.44	34.49	27.24	92.3	1.269
372.	8.49	34.52	0.32		26.84	128.5	800.	4.96	34.52	27.32	85.3	1.359
466.	7.25	34.45	0.40		26.97	116.9	1000.	4.25	34.54	27.42	77.0	1.523
605.	6.04	34.47	0.52		27.15	100.7	1200.	3.57	34.57	27.51	68.3	1.670
804.	4.94	34.52	0.79		27.32	85.1	1500.	2.88	34.60	27.60	59.8	1.865
1005.	4.23	34.54	0.98		27.42	76.8						
1204.	3.56	34.57	1.24		27.51	68.1						
1506.	2.87	34.60	1.58		27.60	59.7						

CROMWELL 9, STATION 31, 17-29N LAT, 148- 3W LONG, OCT. 15, 1964, 0900 G.C.T.
DRY BULB 25.0 WET BULB 22.2 WIND SPEED 26, DIR. 07 BAR. 18 WEATHER 02 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	25.71	34.29	4.77		22.61	524.8	0.	25.71	34.29	22.61	524.7	0.000
8.Δ	25.75	34.29	4.82		22.60	526.2	10.	25.74	34.29	22.60	526.3	0.053
20.Δ	25.60	34.29			22.64	522.3	20.	25.60	34.29	22.64	522.3	0.106
30.Δ	25.30	34.36			22.79	508.8	30.	25.30	34.36	22.79	508.8	0.158
50.Δ	25.28	34.37			22.80	508.3	50.	25.28	34.37	22.80	508.3	0.260
75.Δ	23.70	34.80			23.60	433.1	75.	23.70	34.80	23.60	433.1	0.379
99.	22.54	35.05	5.05		24.12	383.9	100.	22.49	35.06	24.14	382.3	0.481
123.	21.38	35.11	4.89		24.49	349.5	150.	19.76	35.03	24.87	314.6	0.657
148.	19.99	35.06	4.66		24.83	318.2	200.	15.04	34.46	25.56	249.0	0.799
172.	17.24	34.69	4.14		25.24	279.6	250.	10.83	34.17	26.18	190.3	0.910
186.	16.34	34.60	4.18		25.38	266.2	300.	9.42	34.28	26.51	159.6	0.998
219.	13.16	34.27	3.92		25.81	224.9	400.	8.47	34.48	26.82	131.5	1.145
245.	11.11	34.17	3.75		26.13	194.9	500.	7.23	34.46	26.98	116.5	1.270
270.	10.00	34.19	3.23		26.34	175.0	600.	6.40	34.46	27.10	106.0	1.382
294.	9.50	34.26	2.27		26.48	162.1	700.	5.73	34.48	27.20	97.0	1.485
391.	8.59	34.48	0.88		26.80	133.4	800.	5.20	34.50	27.28	89.4	1.579
489.	7.34	34.46	0.84		26.97	117.8	1000.	4.41	34.54	27.40	78.9	1.750
585.	6.51	34.46	0.75		27.08	107.5	1200.	3.78	34.56	27.48	71.3	1.902
780.	5.29	34.50	0.63		27.27	90.8						
975.	4.50	34.54	0.86		27.39	79.9						
1171.	3.87	34.55	1.10		27.46	73.1						
1467.	3.16	34.59	1.48		27.57	63.7						

CROMWELL 9, STATION 32, 18-58N LAT, 147-59W LONG, OCT. 15, 1964, 1800 G.C.T.
DRY BULB 23.9 WET BULB 22.0 WIND SPEED 18, DIR. 06 BAR. 18 WEATHER 02 VIS. 8 CLOUD TYPE 8, COVER 7

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.92	35.02	5.03		23.40	449.0	0.	24.92	35.02	23.40	449.0	0.000
10.Δ	24.87	35.02	4.98		23.42	448.0	10.	24.87	35.02	23.42	448.0	0.045
30.Δ	24.80	35.02			23.44	446.8	20.	24.84	35.02	23.43	447.4	0.090
50.Δ	24.68	35.03			23.48	443.4	30.	24.80	35.02	23.44	446.8	0.135
77.	23.12	35.13	5.30		24.02	393.2	50.	24.68	35.03	23.48	443.4	0.225
102.	21.85	35.20	5.23		24.43	354.7	75.	23.26	35.12	23.97	397.6	0.331
125.	21.15	35.26	5.01		24.67	332.7	100.	21.94	35.19	24.40	357.3	0.426
154.	20.23	35.16	4.78		24.84	317.3	150.	20.37	35.18	24.82	319.2	0.596
178.	19.17	35.07	4.57		25.05	298.1	200.	17.99	34.88	25.20	284.4	0.749
192.	18.47	34.96	4.66		25.14	289.5	250.	14.30	34.37	25.66	241.1	0.881
226.	16.19	34.59	4.55		25.41	264.8	300.	10.72	34.08	26.13	195.8	0.991
254.	13.98	34.34	4.66		25.70	237.0	400.	7.28	34.03	26.64	147.2	1.164
279.	12.08	34.16	4.59		25.94	214.0	500.	6.45	34.23	26.91	122.3	1.300
304.	10.48	34.07	4.24		26.16	192.6	600.	5.77	34.36	27.10	105.0	1.415
405.	7.21	34.04	2.77		26.66	145.7	700.	5.26	34.44	27.22	94.0	1.516
507.	6.44	34.25	0.99		26.92	121.0	800.	4.87	34.49	27.30	86.7	1.607
608.	5.72	34.37	0.66		27.11	103.9	1000.	4.15	34.53	27.42	76.6	1.772
810.	4.84	34.49	0.72		27.31	86.1	1200.	3.58	34.56	27.50	69.1	1.920
1010.	4.12	34.53	0.90		27.42	76.2	1500.	2.83	34.59	27.60	59.9	2.116
1210.	3.55	34.56	1.14		27.50	68.8						
1512.	2.80	34.59	1.54		27.60	59.6						

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 9, STATION 33, 20-29N LAT, 147-59W LONG, OCT. 16, 1964, 0300 G.C.T.
DRY BULB 24.4 WET BULB 22.2 WIND SPEED 22, DIR. 08 BAR. 17 WEATHER 03 VIS. 6 CLOUD TYPE 8, COVER 7

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	24.50	35.03	4.94		23.54	436.3	0.	24.50	35.03	23.54	436.2	0.000
10.△	24.54	35.02	4.94		23.52	438.5	10.	24.54	35.02	23.52	438.5	0.044
30.△	24.48	35.03			23.54	436.9	20.	24.53	35.02	23.52	438.6	0.088
50.△	24.26	35.07			23.64	428.5	30.	24.48	35.03	23.54	436.9	0.132
75.△	23.90	35.09			23.76	417.8	50.	24.26	35.07	23.64	428.5	0.219
94.	22.96	35.13	5.22		24.06	389.5	75.	23.90	35.09	23.76	417.8	0.326
117.	21.74	35.09	5.23		24.38	360.2	100.	22.63	35.12	24.15	381.4	0.427
142.	20.77	35.15	4.94		24.69	331.4	150.	20.58	35.17	24.76	325.2	0.605
164.	20.09	35.15	4.86		24.87	314.8	200.	17.18	34.71	25.26	278.0	0.757
178.	19.05	34.97	4.43		25.00	302.4	250.	12.77	34.23	25.86	221.3	0.883
210.	16.26	34.59	4.34		25.39	265.9	300.	10.37	34.12	26.22	186.7	0.986
234.	13.92	34.32	3.65		25.70	236.7	400.	7.66	34.07	26.62	149.5	1.155
258.	12.29	34.20	3.72		25.93	214.4	500.	6.01	34.14	26.90	123.0	1.293
281.	11.10	34.15	4.28		26.12	197.0	600.	5.55	34.29	27.07	107.2	1.409
375.	8.31	34.08	3.44		26.53	158.3	700.	5.12	34.39	27.20	96.0	1.512
469.	6.28	34.10	1.86		26.83	129.4	800.	4.74	34.45	27.29	88.1	1.605
563.	5.73	34.25	0.91		27.02	112.3	1000.	4.02	34.51	27.42	76.5	1.771
752.	4.92	34.42	0.76		27.25	91.7	1200.	3.42	34.55	27.51	67.7	1.917
926.	4.30	34.49	1.00		27.37	80.6						
1046.	3.86	34.52	1.87		27.44	74.1						
1252.	3.29	34.56	1.28		27.53	66.0						

CROMWELL 9, STATION 34, 22- ON LAT, 147-59W LONG, OCT. 16, 1964, 1300 G.C.T.
DRY BULB 23.6 WET BULB 21.3 WIND SPEED 16, DIR. 10 BAR. 19 WEATHER 02 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.79	34.96	4.80		23.40	449.6	0.	24.79	34.96	23.40	449.6	0.000
8.	24.80	34.96	4.88		23.39	450.2	10.	24.78	34.97	23.40	449.4	0.045
42.	24.14	35.05	4.95		23.66	426.2	20.	24.64	34.99	23.46	444.0	0.090
64.	23.60	35.04	5.07		23.81	412.6	30.	24.45	35.02	23.54	436.9	0.135
84.	22.66	35.20	5.17		24.20	375.8	50.	23.98	35.04	23.70	422.8	0.221
105.	21.82	35.23	5.06		24.46	351.8	75.	23.10	35.13	24.02	392.9	0.324
127.	20.98	35.23	4.86		24.69	330.5	100.	22.01	35.23	24.41	356.7	0.418
149.	20.40	35.19	4.69		24.82	319.3	150.	20.36	35.19	24.83	318.5	0.589
161.	19.91	35.15	4.68		24.92	310.1	200.	18.00	34.86	25.18	285.9	0.741
188.	18.69	34.96	4.59		25.09	294.7	250.	14.79	34.42	25.59	247.7	0.875
212.	17.28	34.76	4.53		25.28	276.7	300.	11.88	34.15	25.97	211.3	0.991
234.	15.98	34.59	4.46		25.46	260.4	400.	8.17	34.05	26.52	159.1	1.178
254.	14.49	34.38	4.50		25.62	244.5	500.	6.36	34.09	26.81	131.5	1.325
339.	10.24	34.10	3.87		26.23	187.1	600.	5.30	34.22	27.05	109.3	1.446
426.	7.53	34.05	2.90		26.62	149.8	700.	5.01	34.37	27.19	96.1	1.550
488.	6.53	34.08	2.08		26.78	134.5	800.	4.60	34.45	27.30	86.2	1.642
605.	5.26	34.23	0.82		27.06	108.4	1000.	3.89	34.52	27.43	74.4	1.805
726.	4.98	34.40	0.68		27.22	93.6	1200.	3.34	34.56	27.52	66.2	1.947
830.	4.44	34.46	0.79		27.33	83.6						
1018.	3.85	34.52	1.15		27.44	73.8						
1200.**	3.34**	34.56**			27.52	66.2						

CROMWELL 9, STATION 35, 23-31N LAT, 148- OW LONG, OCT. 16, 1964, 2200 G.C.T.
DRY BULB 23.3 WET BULB 20.6 WIND SPEED 18, DIR. 09 BAR. 21 WEATHER 01 VIS. 8 CLOUD TYPE 8, COVER 2

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	24.74	35.06	4.94		23.49	441.0	0.	24.74	35.06	23.49	441.0	0.000
10.△	24.75	35.06	4.98		23.48	441.7	10.	24.75	35.06	23.48	441.7	0.044
30.△	24.68	35.06			23.50	440.4	20.	24.72	35.06	23.49	441.3	0.089
50.△	24.62	35.07			23.53	438.8	30.	24.68	35.06	23.50	440.4	0.133
75.△	24.00	35.11			23.75	419.2	50.	24.62	35.07	23.53	438.8	0.222
100.	22.15	35.24	5.14		24.38	359.7	75.	24.00	35.11	23.75	419.2	0.330
124.	21.36	35.26	5.04		24.61	338.2	100.	22.15	35.24	24.38	359.7	0.428
150.	20.67	35.25	5.01		24.79	321.9	150.	20.67	35.25	24.79	321.9	0.600
173.	19.80	35.16	4.86		24.96	307.1	200.	17.88	34.85	25.20	284.1	0.753
188.	18.59	34.95	4.72		25.11	293.0	250.	14.96	34.49	25.61	246.2	0.886
221.	16.79	34.71	4.61		25.36	269.4	300.	11.95	34.19	25.99	209.7	1.001
247.	15.22	34.52	4.74		25.57	249.5	400.	8.63	34.05	26.45	166.1	1.191
272.	13.14	34.29	4.80		25.83	224.5	500.	6.51	34.03	26.74	138.0	1.344
297.	12.07	34.20	4.91		25.97	211.3	600.	5.21	34.12	26.98	115.8	1.473
396.	8.74	34.05	4.34		26.44	167.5	700.	4.68	34.26	27.14	100.3	1.582
496.	6.58	34.03	2.54		26.73	139.0	800.	4.49	34.39	27.27	89.3	1.678
593.	5.26	34.11	1.23		26.96	117.1	1000.	4.01	34.50	27.41	76.8	1.846
792.	4.51	34.38	0.77		27.26	90.0	1200.	3.52	34.56	27.50	68.5	1.993
990.	4.04	34.50	1.08		27.41	77.3						
1188.	3.53	34.54	1.26		27.49	69.8						
1484.	2.84	34.58	1.67		27.59	60.7						

△FROM BT DATA
**EXTRAPOLATED DATA

Table 2.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 9, STATION 36, 25- ON LAT, 147-56W LONG, OCT. 17, 1964, 0700 G.C.T.
DRY BULB 23.9 WET BULB 20.8 WIND SPEED 15, DIR. 11 BAR. 21 WEATHER 01 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.01	35.39	5.07		23.95	396.4	0.	24.01	35.39	23.95	396.4	0.000
9.Δ	23.99	35.39	5.07		23.96	396.1	10.	23.99	35.39	23.96	396.1	0.040
30.Δ	23.90	35.38			23.98	395.2	20.	23.95	35.39	23.97	395.7	0.080
50.Δ	23.78	35.37			24.01	393.3	30.	23.90	35.38	23.98	395.2	0.120
75.	21.58	35.25	5.41		24.54	342.9	50.	23.78	35.37	24.01	393.3	0.199
99.	20.83	35.30	5.30		24.79	320.5	75.	21.58	35.25	24.54	342.9	0.292
123.	20.29	35.29	5.10		24.92	308.3	100.	20.81	35.30	24.79	319.9	0.375
149.	19.64	35.18	5.07		25.01	300.8	150.	19.61	35.17	25.02	300.4	0.532
172.	18.75	35.03	4.90		25.13	290.5	200.	17.26	34.78	25.30	274.2	0.676
186.	18.11	34.92	4.86		25.20	283.6	250.	14.25	34.39	25.69	238.4	0.806
219.	16.02	34.60	4.74		25.45	260.1	300.	11.76	34.15	26.00	209.0	0.918
246.	14.47	34.42	4.80		25.66	241.0	400.	8.79	34.05	26.43	168.2	1.109
271.	13.13	34.27	4.83		25.82	225.7	500.	6.63	34.03	26.72	140.1	1.264
294.	12.00	34.17	4.93		25.96	212.1	600.	5.40	34.13	26.96	117.8	1.395
391.	9.03	34.06	4.49		26.40	171.2	700.	4.76	34.24	27.12	102.5	1.506
491.	6.78	34.02	2.80		26.70	142.4	800.	4.42	34.34	27.24	91.7	1.604
587.	5.51	34.11	1.23		26.93	120.2	1000.	3.90	34.46	27.39	78.6	1.776
783.	4.48	34.33	0.53		27.22	93.2	1200.	3.47	34.54	27.49	69.4	1.926
977.	3.95	34.45	0.92		27.38	79.8						
1171.	3.58	34.53	1.22		27.48	71.0						
1464.	2.91	34.57	1.54		27.57	62.1						

CROMWELL 9, STATION 37, 26-32N LAT, 148- OW LONG, OCT. 17, 1964, 1600 G.C.T.
DRY BULB 22.6 WET BULB 20.2 WIND SPEED 08, DIR. 15 BAR. 19 WEATHER 02 VIS. CLOUD TYPE COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.05	35.44	5.15		23.98	393.9	0.	24.05	35.44	23.98	393.9	0.000
11.Δ	24.09	35.44	5.20		23.97	395.4	10.	24.09	35.44	23.97	395.4	0.040
30.Δ	24.06	35.44			23.98	395.4	20.	24.08	35.44	23.97	395.6	0.080
50.Δ	24.05	35.44			23.98	395.9	30.	24.06	35.44	23.98	395.4	0.119
75.Δ	21.60	35.30			24.58	339.8	50.	24.05	35.44	23.98	395.9	0.199
102.	20.59	35.19	5.55		24.77	322.4	75.	21.60	35.30	24.58	339.8	0.292
127.	19.53	35.08	5.44		24.96	304.5	100.	20.64	35.20	24.76	323.0	0.375
153.	17.78	34.82	5.21		25.21	282.0	150.	17.98	34.85	25.18	284.5	0.528
178.	16.75	34.70	4.98		25.36	267.9	200.	15.20	34.50	25.56	248.9	0.663
193.	15.63	34.55	5.05		25.50	254.5	250.	13.04	34.30	25.86	221.6	0.781
228.	13.85	34.38	4.86		25.76	230.8	300.	11.41	34.19	26.09	200.2	0.888
255.	12.88	34.28	5.03		25.88	219.7	400.	8.96	34.06	26.41	170.0	1.074
280.	12.02	34.22	5.10		26.00	208.5	500.	7.00	34.01	26.66	146.4	1.234
305.	11.26	34.18	6.11		26.11	198.2	600.	5.49	34.07	26.91	122.8	1.370
405.	8.86	34.06	4.53		26.43	168.8	700.	4.69	34.18	27.08	106.1	1.486
507.	6.88	34.01	3.32		26.68	144.8	800.	4.30	34.29	27.21	94.2	1.587
607.	5.40	34.08	1.56		26.92	121.3	1000.	3.73	34.43	27.39	78.6	1.762
809.	4.28	34.30	0.57		27.22	93.3	1200.	3.35	34.51	27.48	70.0	1.912
1012.	3.71	34.44	0.74		27.39	78.0						
1203.	3.34	34.51	1.17		27.48	69.9						
1482.	2.79	34.57	1.65		27.58	60.8						

CROMWELL 9, STATION 38, 25- ON LAT, 151- OW LONG, OCT. 18, 1964, 1000 G.C.T.
DRY BULB 24.1 WET BULB 21.9 WIND SPEED 14, DIR. 20 BAR. 16 WEATHER 02 VIS. CLOUD TYPE COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.24	35.35			23.86	405.8	0.	24.24	35.35	23.86	405.8	0.000
10.Δ	24.26	35.36			23.86	406.0	10.	24.26	35.36	23.86	406.0	0.041
30.Δ	24.26	35.36			23.86	406.8	20.	24.27	35.36	23.86	406.5	0.082
52.	24.16	35.35			23.88	405.5	30.	24.26	35.36	23.86	406.8	0.123
78.	22.03	35.29			24.45	352.1	50.	24.20	35.35	23.87	406.6	0.205
102.	20.92	35.27			24.74	325.2	75.	22.31	35.30	24.38	358.9	0.301
127.	19.99	35.17			24.91	309.5	100.	20.99	35.27	24.72	326.8	0.387
153.	19.35	35.11			25.03	298.8	150.	19.42	35.12	25.02	299.9	0.545
180.	18.34	34.96			25.18	286.0	200.	17.35	34.80	25.30	274.9	0.690
193.	17.79	34.87			25.24	279.9	250.	13.80	34.32	25.73	234.4	0.819
226.	15.46	34.53			25.53	253.3	300.	11.14	34.13	26.09	199.8	0.928
253.	13.59	34.30			25.75	232.1	400.	8.60	34.06	26.47	164.5	1.112
278.	11.91	34.14			25.96	212.3	500.	6.46	34.00	26.73	139.6	1.265
303.	11.06	34.13			26.11	198.3	600.	5.39	34.13	26.97	117.0	1.395
404.	8.52	34.06			26.48	163.5	700.	4.79	34.25	27.13	101.8	1.506
505.	6.37	34.00			26.74	138.5	800.	4.42	34.35	27.25	91.4	1.603
603.	5.37	34.14			26.97	116.4	1000.	3.90	34.48	27.40	77.3	1.774
803.	4.41	34.35			27.25	91.1	1200.	3.46	34.52	27.48	70.6	1.924
1002.	3.90	34.48			27.40	77.2	1500.	2.82	34.58	27.59	60.5	2.123
1201.	3.46	34.52			27.48	70.6	2000.	2.12	34.63	27.69	51.0	2.406
1498.	2.82	34.58			27.59	60.5	2500.	1.77	34.66	27.74	46.3	2.654
1994.	2.13	34.63	2.09		27.69	51.1	3000.	1.56	34.68	27.77	43.6	2.883
2494.	1.77	34.66	2.56		27.74	46.3						
2991.	1.58	34.68	3.00		27.77	43.9						
3988.	1.50	34.70	3.63		27.79	44.2						

ΔFROM BT DATA

Table 2.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 9, STATION 39, 25- ON LAT, 154- 1W LONG, OCT. 19, 1964, 0200 G.C.T.
DRY BULB 21.1 WET BULB 19.7 WIND SPEED 28, DIR. 35 BAR. 15 WEATHER 02 VIS. 4 CLOUD TYPE 6, COVER 8

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.53	35.43	5.36		23.83	408.3	0.	24.53	35.43	23.83	408.3	0.000
10.	24.52	35.44	5.37		23.84	407.7	10.	24.52	35.44	23.84	407.7	0.041
30.Δ	24.48	35.44			23.85	407.3	20.	24.52	35.44	23.84	407.8	0.082
50.Δ	24.20	35.43			23.93	400.8	30.	24.48	35.44	23.85	407.3	0.123
77.	21.43	35.28	5.56		24.61	336.8	50.	24.20	35.43	23.93	400.8	0.205
102.	20.56	35.25	5.39		24.82	317.3	75.	21.65	35.29	24.56	341.7	0.298
127.	19.60	35.13	5.20		24.98	302.6	100.	20.60	35.25	24.81	318.1	0.381
153.	18.05	34.87	4.89		25.18	284.7	150.	18.23	34.90	25.16	286.8	0.534
178.	16.96	34.73	4.89		25.34	270.4	200.	15.40	34.55	25.56	249.7	0.669
193.	15.89	34.60	4.87		25.48	256.5	250.	12.43	34.31	25.99	209.0	0.784
227.	13.65	34.40	5.21		25.82	225.3	300.	11.50	34.24	26.11	198.0	0.887
253.	12.31	34.30	5.23		26.01	207.4	400.	9.09	34.10	26.42	169.7	1.073
280.	11.86	34.27	5.28		26.07	201.9	500.	6.77	34.01	26.69	143.1	1.231
305.	11.40	34.23	5.31		26.12	197.0	600.	5.25	34.07	26.93	119.9	1.363
405.	8.96	34.09	4.87		26.43	168.2	700.	4.55	34.19	27.10	103.8	1.476
507.	6.63	34.01	4.97		26.71	141.3	800.	4.25	34.31	27.23	92.2	1.575
608.	5.16	34.08	1.62		26.95	118.3	1000.	3.76	34.46	27.41	76.7	1.746
809.	4.24	34.32	0.69		27.24	91.4	1200.	3.30	34.54	27.51	67.4	1.892
1011.	3.74	34.47	1.06		27.41	76.1	1500.	2.72	34.59	27.61	58.5	2.084
1211.	3.28	34.54	1.48		27.51	67.0						
1521.	2.68	34.59	1.86		27.61	58.2						

CROMWELL 9, STATION 40, 25- ON LAT, 157- 0W LONG, OCT. 19, 1964, 1800 G.C.T.
DRY BULB 23.6 WET BULB 17.7 WIND SPEED 15, DIR. 03 BAR. 21 WEATHER 01 VIS. 8 CLOUD TYPE 8, COVER 4

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.92	35.29			23.61	429.6	0.	24.92	35.29	23.61	429.6	0.000
9.	24.92	35.28			23.60	430.7	10.	24.92	35.28	23.60	430.8	0.043
50.Δ	24.94	35.28			23.59	432.9	20.	24.93	35.28	23.59	431.6	0.087
76.	24.93	35.28			23.59	433.6	30.	24.93	35.28	23.59	432.2	0.130
100.	22.76	35.20			24.17	379.2	50.	24.94	35.28	23.59	432.9	0.217
124.	21.95	35.23			24.43	356.0	75.	24.95	35.28	23.59	434.2	0.327
151.	21.32	35.27			24.63	337.4	100.	22.76	35.20	24.17	379.2	0.429
174.	20.63	35.19			24.76	326.1	150.	21.34	35.27	24.62	338.0	0.610
188.	19.82	35.04			24.86	316.8	200.	19.01	34.94	24.99	304.0	0.772
222.	17.50	34.80			25.26	279.2	250.	15.86	34.62	25.51	256.0	0.913
249.	15.93	34.63			25.50	256.9	300.	13.24	34.33	25.85	224.0	1.034
272.	14.47	34.46			25.69	238.8	400.	9.87	34.12	26.31	180.8	1.238
298.	13.32	34.34			25.84	225.0	500.	7.51	34.03	26.60	152.3	1.406
399.	9.90	34.12			26.30	181.1	600.	5.65	34.05	26.87	126.4	1.547
497.	7.58	34.03			26.59	153.2	700.	4.86	34.15	27.04	110.6	1.667
597.	5.68	34.05			26.86	126.9	800.	4.54	34.27	27.17	98.9	1.772
794.	4.57	34.26			27.16	99.6	1000.	3.86	34.46	27.40	77.9	1.951
994.	3.88	34.46			27.39	78.3	1200.	3.38	34.53	27.50	68.7	2.100
1189.	3.40	34.53			27.49	69.0	1500.	2.82	34.57	27.58	61.1	2.297
1489.	2.84	34.57			27.58	61.4	2000.	2.11	34.63	27.69	50.8	2.582
1996.	2.11	34.63	3.12		27.69	50.8	2500.	1.74	34.63	27.72	48.0	2.833
2494.	1.74	34.63	2.79		27.72	48.1	3000.	1.55	34.65	27.75	45.5	3.072
2992.	1.58	34.66	3.18		27.75	45.4						
3809.	1.50	34.70	3.66		27.79	43.7						

TEMPERATURE ERROR TERM AT 700. METERS IS 0.13

CROMWELL 9, STATION 41, 23-29N LAT, 157- 0W LONG, OCT. 20, 1964, 0500 G.C.T.
DRY BULB 23.3 WET BULB 18.9 WIND SPEED 16, DIR. 04 BAR. 20 WEATHER 01 VIS. 8 CLOUD TYPE 8, COVER 1

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	25.17	35.09			23.38	451.3	0.	25.17	35.09	23.38	451.3	0.000
10.Δ	25.17	35.09			23.38	451.7	10.	25.17	35.09	23.38	451.7	0.045
30.Δ	25.10	35.09			23.40	450.4	20.	25.15	35.09	23.39	451.4	0.091
50.Δ	24.94	35.09			23.45	446.6	30.	25.10	35.09	23.40	450.4	0.136
73.	23.64	35.13			23.87	407.5	50.	24.94	35.09	23.45	446.6	0.227
97.	22.65	35.24			24.24	373.2	75.	23.55	35.14	23.90	404.5	0.334
120.	21.58	35.24			24.54	345.3	100.	22.50	35.24	24.28	369.0	0.431
143.	20.96	35.25			24.71	329.1	150.	20.76	35.22	24.75	326.2	0.607
168.	19.96	35.10			24.87	315.3	200.	17.83	34.85	25.22	282.4	0.760
182.	18.89	34.98			25.05	297.9	250.	15.15	34.53	25.59	247.5	0.894
214.	17.11	34.76			25.32	272.8	300.	12.82	34.31	25.91	217.7	1.011
238.	15.83	34.60			25.50	256.6	400.	9.40	34.07	26.35	176.2	1.210
262.	14.49	34.46			25.69	238.9	500.	7.13	34.04	26.67	146.0	1.372
286.	13.42	34.36			25.83	225.2	600.	5.46	34.10	26.93	120.7	1.507
379.	9.96	34.10			26.28	183.2	700.	4.70	34.21	27.10	104.0	1.620
470.	7.81	34.04			26.57	155.4	800.	4.34	34.33	27.24	91.9	1.720
562.	5.90	34.06			26.84	128.6	1000.	3.83	34.48	27.41	76.5	1.890
745.	4.56	34.27			27.17	98.3	1200.	3.33	34.56	27.52	66.4	2.035
930.	3.99	34.44			27.36	80.6						
1116.	3.58	34.52			27.47	71.3						
1398.	2.86	34.57			27.58	61.1						

ΔFROM BT DATA

Table 2.--Continued

CROMWELL 9, STATION 42, 22- ON LAT, 157- 1W LONG, OCT. 20, 1964, 1500 G.C.T.
DRY BULB 23.4 WET BULB 20.4 WIND SPEED 12, DIR. 04 BAR. 18 WEATHER 01 VIS. 8 CLOUD TYPE , COVER

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.27	35.05			23.32	457.1	0.	25.27	35.05	23.32	457.1	0.000
9.Δ	25.33	35.05			23.30	459.2	10.	25.33	35.05	23.30	459.3	0.046
50.Δ	25.33	35.05			23.30	460.8	20.	25.35	35.05	23.29	460.3	0.092
75.Δ	25.33	35.05			23.30	461.8	30.	25.36	35.05	23.29	460.8	0.139
95.	23.62	35.07			23.83	412.2	50.	25.33	35.05	23.30	460.8	0.232
117.	22.58	35.12			24.17	380.7	75.	25.33	35.05	23.30	461.8	0.348
140.	21.40	35.17			24.53	346.3	100.	23.35	35.08	23.91	404.0	0.457
163.	20.57	35.13			24.73	328.4	150.	21.04	35.16	24.62	337.9	0.644
178.	19.80	35.07			24.89	313.8	200.	18.81	34.96	25.05	298.4	0.804
210.	18.31	34.89			25.13	291.4	250.	15.49	34.55	25.54	253.1	0.943
234.	16.63	34.69			25.38	267.6	300.	12.02	34.20	25.99	210.1	1.060
258.	14.89	34.48			25.61	245.7	400.	9.29	34.14	26.42	169.6	1.252
281.	12.99	34.28			25.86	222.5	500.	7.34	34.17	26.74	139.7	1.408
375.	9.89	34.15			26.33	178.3	600.	5.96	34.24	26.98	116.3	1.537
469.	7.91	34.15			26.64	148.7	700.	5.21	34.33	27.14	101.1	1.647
563.	6.35	34.21			26.91	123.5	800.	4.81	34.41	27.25	91.4	1.744
752.	4.99	34.38			27.21	95.5	1000.	4.24	34.49	27.38	80.3	1.918
942.	4.42	34.48			27.35	83.0	1200.	3.66	34.54	27.48	71.6	2.072
1130.	3.84	34.51			27.43	75.3						
1418.	3.07	34.56			27.55	64.5						

TEMPERATURE ERROR TERM AT 300. METERS IS 0.17

ΔFROM BT DATA

Table 3.--Original and derived oceanographic data for Townsend Cromwell cruise 10

CROMWELL 10, STATION 1, 20-36N LAT, 157-15W LONG, NOV. 5, 1964, 0900 G.C.T.
DRY BULB 25.2 WET BULB 22.1 WIND SPEED 24, DIR. 05 BAR. 20 WEATHER 02 VIS. 8 CLOUD TYPE , COVER 2

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.66	34.92			23.10	477.9	0.	25.66	34.92	23.10	477.9	0.000
10.	25.67	34.92			23.10	478.6	10.	25.67	34.92	23.10	478.6	0.048
51.	25.41	35.04			23.27	463.9	20.	25.64	34.95	23.13	476.2	0.096
77.	25.12	35.05			23.36	455.8	30.	25.59	34.97	23.16	473.1	0.144
103.	23.33	35.10			23.93	402.2	50.	25.42	35.04	23.26	464.4	0.239
128.	21.64	35.11			24.42	356.5	75.	25.17	35.05	23.35	457.2	0.355
153.	20.42	35.07			24.72	328.6	100.	23.57	35.09	23.86	409.3	0.464
178.	19.39	34.98			24.92	310.0	150.	20.55	35.08	24.69	331.2	0.650
194.	19.04	34.94			24.98	304.9	200.	18.64	34.90	25.05	298.2	0.809
228.	16.42	34.68			25.42	263.5	250.	15.21	34.56	25.61	246.1	0.946
253.	15.06*	34.55			25.63	244.1	300.	12.00	34.27	26.04	204.9	1.060
280.	13.63	34.41			25.83	225.6	400.	8.26	34.13	26.57	154.3	1.241
306.	11.50	34.23			26.10	198.9	500.	6.28	34.21	26.91	121.7	1.380
406.	8.19	34.14			26.59	152.6	600.	5.58	34.33	27.09	105.3	1.495
508.	6.17	34.22			26.94	119.6	700.	5.08	34.41	27.22	94.0	1.596
604.	5.57	34.33			27.10	104.9	800.	4.66	34.47	27.31	85.5	1.687
810.	4.62	34.47			27.32	84.9	1000.	3.99	34.53	27.43	74.8	1.849
1018.	3.94	34.53			27.44	74.1	1200.	3.44	34.57	27.52	66.8	1.992
1222.	3.38	34.57			27.53	66.1	1500.	2.79	34.60	27.61	58.8	2.183
1523.	2.75	34.60			27.61	58.4						

CROMWELL 10, STATION 2, 19- ON LAT, 156-56W LONG, NOV. 5, 1964, 2000 G.C.T.
DRY BULB 25.8 WET BULB 21.1 WIND SPEED 03, DIR. 00 BAR. 18 WEATHER 03 VIS. 6 CLOUD TYPE 6, COVER 6

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.94	34.92			23.01	486.2	0.	25.94	34.92	23.01	486.2	0.000
10.	25.97	34.93			23.01	486.7	10.	25.97	34.93	23.01	486.7	0.049
100.	25.99	34.92			23.00	491.7	20.	25.99	34.93	23.01	487.6	0.098
126.	25.96	34.93			23.01	491.1	30.	26.00	34.93	23.00	488.3	0.147
152.	25.83	34.94			23.06	487.6	50.	26.02	34.93	23.00	489.6	0.246
177.	23.61	35.07			23.83	415.0	75.	26.02	34.93	23.00	490.9	0.369
191.	22.32	35.11			24.23	377.1	100.	25.99	34.92	23.00	491.7	0.493
226.	19.05	34.99			25.02	302.6	150.	25.88	34.94	23.04	489.2	0.740
252.	16.71	34.69			25.36	270.0	200.	21.48	35.11	24.47	354.9	0.953
279.	14.47	34.45			25.68	239.7	250.	16.89	34.72	25.34	272.1	1.111
302.	12.27	34.29			26.01	208.6	300.	12.46	34.30	25.98	211.1	1.233
405.	8.24	34.13			26.58	154.1	400.	8.30	34.12	26.56	155.3	1.418
506.	6.40	34.22			26.91	122.7	500.	6.46	34.21	26.89	124.1	1.559
605.	5.67	34.35			27.10	104.7	600.	5.69	34.34	27.09	105.4	1.675
810.	4.77	34.46			27.30	87.5	700.	5.18	34.42	27.21	94.6	1.776
1010.	4.21	34.52			27.40	78.1	800.	4.80	34.46	27.29	87.9	1.868
1210.	3.62	34.56			27.50	69.6	1000.	4.23	34.52	27.40	78.4	2.036
1511.	2.85	34.60			27.60	59.5	1200.	3.65	34.56	27.49	70.0	2.187
							1500.	2.88	34.60	27.60	59.8	2.384

CROMWELL 10, STATION 3, 17-29N LAT, 157- 2W LONG, NOV. 6, 1964, 0600 G.C.T.
DRY BULB 25.7 WET BULB 22.2 WIND SPEED 24, DIR. 08 BAR. 16 WEATHER 02 VIS. 7 CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.99	33.95			22.27	557.5	0.	25.99	33.95	22.27	557.5	0.000
12.	25.97	33.95			22.27	557.4	10.	25.97	33.95	22.27	557.4	0.056
30.Δ	25.97	33.95			22.27	558.1	20.	25.97	33.95	22.27	557.6	0.112
50.Δ	25.97	33.95			22.27	558.9	30.	25.97	33.95	22.27	558.1	0.168
73.	23.81	34.83			23.59	433.9	50.	25.97	33.95	22.27	558.9	0.281
99.	22.39	35.01			24.14	382.8	75.	23.68	34.86	23.65	428.1	0.405
123.	21.35	35.12			24.51	348.0	100.	22.35	35.02	24.15	381.1	0.507
149.	19.98	35.07			24.84	317.3	150.	19.93	35.07	24.85	316.3	0.683
173.	18.34	34.88			25.11	291.6	200.	15.99	34.53	25.41	263.7	0.829
187.	16.86	34.66			25.31	273.5	250.	11.04	34.20	26.16	191.8	0.944
220.	14.60	34.40			25.62	244.4	300.	9.69	34.28	26.47	163.5	1.034
247.	11.20	34.20			26.14	194.3	400.	7.66	34.29	26.79	133.7	1.183
272.	10.39	34.22			26.30	179.4	500.	6.18	34.29	26.99	114.5	1.309
296.	9.78	34.28			26.45	165.3	600.	5.91	34.42	27.13	102.7	1.418
393.	7.80	34.29			26.77	135.5	700.	5.40	34.47	27.23	93.5	1.518
492.	6.22	34.28			26.98	115.6	800.	4.87	34.49	27.31	86.4	1.609
575.	6.03	34.40			27.10	105.3	1000.	4.12	34.53	27.42	76.3	1.773
766.	5.02	34.48			27.28	88.6	1200.	3.52	34.56	27.50	68.6	1.920
959.	4.25	34.52			27.40	78.1						
1152.	3.69	34.55			27.48	70.7						
1440.	2.93	34.58			27.58	61.5						

TEMPERATURE ERROR TERM AT 200. METERS IS 0.15

ΔFROM BT DATA
*INTERPOLATED DATA

Table 3.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 10, STATION 4, 16- 3N LAT, 156-58W LONG, NOV. 6, 1964, 1600 G.C.T.
DRY BULB 24.2 WET BULB 22.8 WIND SPEED 16, DIR. 06 BAR. 14 WEATHER 02 VIS. 7 CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.91	34.00			22.33	551.5	0.	25.91	34.00	22.33	551.5	0.000
10.Δ	25.93	34.00			22.32	552.5	10.	25.93	34.00	22.32	552.5	0.056
20.Δ	25.93	34.00			22.32	552.9	20.	25.93	34.00	22.32	552.9	0.111
30.Δ	25.93	34.00			22.32	553.3	30.	25.93	34.00	22.32	553.3	0.167
49.	25.29	34.78			23.11	479.0	50.	25.20	34.80	23.15	475.3	0.271
74.	22.79	34.96			23.98	396.3	75.	22.71	34.97	24.02	393.4	0.380
97.	21.18	35.16			24.59	339.7	100.	20.99	35.16	24.63	335.2	0.472
121.	19.67	35.03			24.89	311.4	150.	17.44	34.72	25.21	281.2	0.627
146.	17.84	34.77			25.15	286.8	200.	12.85	34.30	25.90	216.4	0.752
170.	15.36	34.49			25.52	252.4	250.	10.28	34.30	26.38	170.8	0.850
185.	13.91	34.34			25.72	233.7	300.	9.15	34.30	26.56	153.9	0.932
217.	11.91	34.31			26.09	198.3	400.	7.95	34.46	26.88	125.5	1.073
243.	10.64	34.33			26.34	174.9	500.	6.66	34.48	27.08	106.8	1.190
269.	9.48	34.24			26.47	162.8	600.	6.04	34.49	27.17	99.2	1.294
292.	9.25	34.26			26.53	156.6	700.	5.25	34.49	27.27	89.8	1.390
390.	7.96	34.45			26.87	126.0	800.	4.76	34.51	27.33	83.9	1.478
489.	6.92	34.44			27.04	110.3	1000.	4.02	34.55	27.45	73.4	1.637
493.	6.78	34.48			27.06	108.4						
586.	6.20	34.49			27.15	101.1						
623.	5.78	34.49			27.20	96.0						
758.	5.00	34.50			27.30	86.8						
967.	4.08	34.54			27.43	74.6						
1000.**	4.02 **	34.55**			27.45	73.4						

CROMWELL 10, STATION 5, 14-29N LAT, 156-59W LONG, NOV. 7, 1964, 0100 G.C.T.
DRY BULB 26.4 WET BULB 22.8 WIND SPEED 21, DIR. 07 BAR. 12 WEATHER 03 VIS. 8 CLOUD TYPE 8, COVER 5

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.84	34.08			22.41	543.7	0.	25.84	34.08	22.41	543.7	0.000
8.	25.83	34.08			22.41	543.7	10.	25.83	34.09	22.42	543.3	0.055
30.Δ	25.80	34.18			22.50	536.5	20.	25.82	34.13	22.45	540.4	0.109
50.Δ	25.74	34.25			22.57	530.5	30.	25.80	34.18	22.50	536.5	0.164
70.	23.28	34.83			23.74	419.0	50.	25.74	34.25	22.57	530.5	0.271
93.	22.26	35.04			24.20	376.9	75.	23.01	34.91	23.88	406.1	0.389
116.	20.40	34.96			24.64	334.7	100.	21.77	35.04	24.33	364.3	0.486
139.	17.89	34.78			25.15	287.0	150.	17.19	34.71	25.26	276.4	0.647
164.	16.44	34.64			25.39	264.8	200.	13.63	34.55	25.94	213.2	0.771
196.	14.04	34.61			25.90	216.9	250.	10.53	34.22	26.27	181.6	0.870
211.	12.51	34.37			26.02	204.9	300.	9.44	34.36	26.57	153.7	0.955
277.	9.99	34.30			26.43	166.9	400.	7.90	34.48	26.90	123.4	1.095
341.	8.70	34.48			26.78	134.1	500.	6.81	34.47	27.05	109.9	1.213
407.	7.82	34.47			26.91	122.7	600.	5.97	34.48	27.17	98.8	1.318
539.	6.45	34.47			27.10	105.3	700.	5.34	34.50	27.26	90.1	1.413
671.	5.51	34.50			27.24	92.3	800.	4.81	34.52	27.34	83.5	1.501
805.	4.79	34.52			27.34	83.2	1000.	4.08	34.55	27.44	74.3	1.661
1013.	4.05	34.55			27.45	73.9						

TEMPERATURE ERROR TERM AT 250. METERS IS 0.23
SALINITY ERROR TERM AT 250. METERS IS 0.05

CROMWELL 10, STATION 6, 13- ON LAT, 157- OW LONG, NOV. 7, 1964, 0900 G.C.T.
DRY BULB 26.0 WET BULB 23.1 WIND SPEED 26, DIR. 06 BAR. 13 WEATHER 02 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.67	33.92			22.03	580.0	0.	26.67	33.92	22.03	580.0	0.000
10.Δ	26.63	33.92			22.04	579.2	10.	26.63	33.92	22.04	579.2	0.058
30.Δ	26.62	33.92			22.05	579.7	20.	26.63	33.91	22.04	580.5	0.117
50.Δ	26.40	34.10			22.25	560.9	30.	26.62	33.92	22.05	579.7	0.175
71.	22.86	34.86			23.89	405.3	50.	26.40	34.10	22.25	560.9	0.290
94.	21.18	35.07			24.52	346.1	75.	22.49	34.93	24.05	390.2	0.410
118.	19.35	34.97			24.93	307.7	100.	20.82	35.08	24.62	336.2	0.501
140.	15.97	34.53			25.41	261.7	150.	14.50	34.39	25.63	241.1	0.647
164.	12.76	34.26			25.89	216.5	200.	10.59	34.26	26.29	178.7	0.753
178.	11.68	34.22			26.06	199.8	250.	9.35	34.39	26.61	149.0	0.835
210.	10.27	34.29			26.37	170.9	300.	9.09	34.51	26.74	137.0	0.907
233.	9.68	34.35			26.52	157.2	400.	8.29	34.57	26.91	122.4	1.038
257.	9.25	34.41			26.64	146.3	500.	7.30	34.53	27.03	112.0	1.157
282.	9.18	34.48			26.70	140.5	600.	6.39	34.52	27.14	101.9	1.265
375.	8.52	34.57			26.88	125.3	700.	5.61	34.52	27.24	92.9	1.363
470.	7.59	34.54			26.99	115.2	800.	5.01	34.53	27.32	85.3	1.453
563.	6.71	34.52			27.10	105.6	1000.	4.17	34.57	27.45	74.0	1.614
752.	5.27	34.52			27.28	88.7	1200.	3.49	34.59	27.54	65.5	1.756
939.	4.41	34.56			27.41	76.9						
1128.	3.72	34.58			27.50	68.7						
1415.	2.94	34.61			27.60	59.2						

ΔFROM BT DATA
**EXTRAPOLATED DATA

Table 3.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 10, STATION 7, 11-30N LAT, 157- 0W LONG, NOV. 7, 1964, 1800 G.C.T.
DRY BULB 25.6 WET BULB 23.8 WIND SPEED 23, DIR. 06 BAR. 12 WEATHER 14 VIS. 7 CLOUD TYPE 1, COVER 7

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.43	33.69			21.93	589.4	0.	26.43	33.69	21.93	589.4	0.000
11.	26.44	33.69			21.93	590.1	10.	26.44	33.69	21.93	590.1	0.059
20.Δ	26.43	33.69			21.93	590.1	20.	26.43	33.69	21.93	590.1	0.119
30.Δ	26.43	33.69			21.93	590.5	30.	26.43	33.69	21.93	590.5	0.178
51.	20.53	34.56			24.31	364.6	50.	20.88	34.52	24.18	376.8	0.276
75.	15.88	34.46			25.38	262.9	75.	15.88	34.46	25.38	262.9	0.356
101.	12.95	34.33			25.90	213.4	100.	13.03	34.33	25.89	214.7	0.416
126.	11.49	34.45			26.28	178.3	150.	11.28	34.61	26.44	163.4	0.512
152.	11.28	34.62			26.45	162.7	200.	10.61	34.67	26.61	148.5	0.590
176.	10.91	34.67			26.55	153.1	250.	10.33	34.70	26.68	142.6	0.664
190.	10.70	34.66			26.58	150.5	300.	9.36	34.63	26.79	132.7	0.733
225.	10.46	34.70			26.66	144.2	400.	8.11	34.57	26.94	119.6	0.860
250.	10.33	34.70			26.68	142.6	500.	7.04	34.55	27.08	107.1	0.975
276.	9.92	34.67			26.73	138.5	600.	6.29	34.53	27.16	99.6	1.079
300.	9.36	34.63			26.79	132.7	700.	5.65	34.54	27.25	92.0	1.176
400.	8.11	34.57			26.94	119.6	800.	5.10	34.55	27.33	84.9	1.265
499.	7.05	34.55			27.08	107.2	1000.	4.24	34.57	27.44	74.6	1.427
599.	6.30	34.53			27.16	99.7	1200.	3.59	34.59	27.52	66.9	1.570
797.	5.12	34.55			27.33	85.1						
996.	4.25	34.57			27.44	74.7						
1194.	3.65	34.59			27.52	67.6						
1493.	2.84	34.62			27.62	57.8						

CROMWELL 10, STATION 7A, 10- 7N LAT, 153-56W LONG, NOV. 8, 1964, 1500 G.C.T.
DRY BULB 24.2 WET BULB 22.9 WIND SPEED 16, DIR. 36 BAR. 10 WEATHER 02 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	27.04	34.01	4.59	0.29	21.98	584.8	0.	27.04	34.01	21.98	584.8	0.000
10.Δ	27.06	34.01	4.58	0.31	21.98	585.8	10.	27.06	34.01	21.98	585.8	0.059
20.Δ	25.66	34.92			23.10	478.7	20.	25.66	34.92	23.10	478.7	0.113
30.Δ	25.66	34.92			23.10	479.1	30.	25.66	34.92	23.10	479.1	0.161
50.	22.59	34.85	4.76	0.33	23.96	397.9	50.	22.59	34.85	23.96	397.9	0.249
75.	17.14	34.61	3.88	0.73	25.20	280.0	75.	17.14	34.61	25.20	280.0	0.335
101.	12.90	34.44	1.91	1.58	26.00	204.4	100.	13.02	34.44	25.98	206.5	0.396
126.	11.98	34.68	0.30	1.91	26.36	170.2	150.	11.38	34.70	26.49	158.3	0.488
152.	11.34	34.70	0.48	2.13	26.50	157.9	200.	10.73	34.72	26.63	146.8	0.565
176.	11.01	34.72		2.53	26.57	151.1	250.	10.15	34.71	26.72	138.6	0.637
191.	10.91	34.72	0.46	2.55	26.59	149.7	300.	9.81	34.82	26.86	126.5	0.703
200.	10.73	34.72	0.44	2.16	26.63	146.8	400.	9.02	34.76	26.94	119.9	0.828
225.	10.37	34.72	0.60	2.73	26.69	141.2	500.	8.06	34.61	26.98	117.3	0.948
252.	10.13	34.71	0.47	2.13	26.72	138.5	600.	7.12	34.57	27.08	108.3	1.061
272.	9.93	34.70	0.61	2.09	26.75	136.3	700.	6.24	34.55	27.19	98.7	1.166
273.	9.93	34.71	0.44	2.34	26.76	135.6	800.	5.58	34.55	27.27	91.4	1.262
420.	8.79	34.66	0.55		26.91	123.8	1000.	4.62	34.56	27.39	80.4	1.436
564.	7.46	34.58	0.38	3.32	27.04	111.9	1200.	3.92	34.58	27.48	71.9	1.590
710.	6.16	34.55	0.73	2.69	27.20	97.8	1500.	3.14	34.61	27.58	62.4	1.795
931.	4.91	34.55	1.01	2.85	27.35	83.9	2000.	2.19	34.65	27.70	50.5	2.082
1295.	3.66	34.59	1.53	2.63	27.52	68.6	2500.	1.82	34.67	27.74	46.1	2.328
1659.	2.80	34.62	1.80	2.50	27.62	58.3						
2023.	2.16	34.65	2.24	2.25	27.70	50.1						
2742.	1.83	34.68	2.69	2.74	27.75	46.5						

SALINITY ERROR TERM AT 300. METERS IS 0.07
SALINITY ERROR TERM AT 400. METERS IS 0.06

CROMWELL 10, STATION 8, 11-28N LAT, 153-59W LONG, NOV. 9, 1964, 0000 G.C.T.
DRY BULB 27.0 WET BULB 23.5 WIND SPEED 20, DIR. 08 BAR. 10 WEATHER 01 VIS. 7 CLOUD TYPE 1, COVER 7

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.55	34.02	4.41		22.14	569.2	0.	26.55	34.02	22.14	569.2	0.000
11.	26.59	34.02	4.75		22.13	570.9	10.	26.59	34.02	22.13	570.8	0.057
20.Δ	26.58	34.02			22.14	570.9	20.	26.58	34.02	22.14	570.9	0.115
30.Δ	26.52	34.07			22.19	565.9	30.	26.52	34.07	22.19	565.9	0.172
51.	21.88	34.61	5.10		23.98	396.2	50.	22.15	34.58	23.88	405.3	0.270
78.	18.89	34.81	4.49		24.92	306.7	75.	19.16	34.82	24.86	312.8	0.360
100.	15.72	34.52	3.76		25.46	255.8	100.	15.72	34.52	25.46	255.8	0.432
124.	12.68	34.49	1.35		26.08	197.1	150.	11.61	34.64	26.40	167.0	0.539
150.	11.61	34.64	0.53		26.40	167.0	200.	10.68	34.71	26.63	146.7	0.618
176.	10.97	34.68	0.42		26.55	153.4	250.	10.14	34.71	26.72	138.6	0.690
191.	10.77	34.70	0.31		26.60	148.8	300.	9.65	34.69	26.79	133.1	0.758
222.	10.46	34.72	0.31		26.67	142.7	400.	8.69	34.64	26.90	123.4	0.888
250.	10.14	34.71	0.42		26.72	138.6	500.	7.68	34.59	27.02	113.4	1.007
276.	9.83	34.70	0.44		26.77	134.7	600.	6.85	34.56	27.11	105.2	1.117
299.	9.66	34.69	0.44		26.79	133.2	700.	6.09	34.55	27.21	96.8	1.219
398.	8.71	34.64	0.40		26.90	123.6	800.	5.46	34.55	27.29	89.5	1.314
499.	7.69	34.59	0.43		27.02	113.5	1000.	4.49	34.56	27.41	78.5	1.484
598.	6.87	34.56	0.66		27.11	105.4	1200.	3.79	34.58	27.49	70.4	1.634
774.	5.60	34.55	0.95		27.27	91.1						
924.	4.90	34.56	0.89		27.36	82.9						
1310.	3.52	34.59	1.55		27.53	67.0						

ΔFROM BT DATA

Table 3.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 10, STATION 9, 13- ON LAT, 153-57W LONG, NOV. 9, 1964, 1000 G.C.T.
DRY BULB 25.0 WET BULB 23.4 WIND SPEED 22, DIR. 07 BAR. 15 WEATHER 01 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.43	33.94	4.67	0.33	22.12	571.4	0.	26.43	33.94	22.12	571.4	0.000
11.Δ	26.46	33.94	4.70	0.33	22.11	572.7	10.	26.46	33.94	22.11	572.7	0.058
30.Δ	26.44	34.00			22.16	568.5	20.	26.49	33.93	22.10	574.4	0.115
51.	25.81	34.63	5.18	0.31	22.83	505.2	30.	26.44	34.00	22.16	568.5	0.173
78.	22.34	34.87	4.81		24.04	390.7	50.	25.87	34.60	22.79	509.2	0.282
102.	20.13	35.01	4.65	0.42	24.75	323.7	75.	22.77	34.86	23.91	403.0	0.396
128.	16.85	34.65	4.08	0.61	25.30	272.2	100.	20.31	35.01	24.70	328.4	0.489
153.	12.94	34.30	2.67	1.82	25.88	216.8	150.	13.36	34.33	25.82	222.8	0.627
178.	11.60	34.48	1.04	2.53	26.28	179.3	200.	10.98	34.54	26.44	164.4	0.725
191.	11.21	34.52	1.01	2.48	26.38	169.7	250.	10.17	34.60	26.63	147.3	0.804
226.	10.47	34.58	0.71	2.75	26.56	153.2	300.	9.54	34.60	26.74	137.8	0.875
253.	10.14	34.60	0.54	2.45	26.64	146.8	400.	8.61	34.60	26.89	125.0	1.008
281.	9.83	34.60	0.46	2.74	26.69	142.2	500.	7.56	34.57	27.02	112.9	1.128
305.	9.46	34.60	0.35		26.75	136.7	600.	6.79	34.54	27.11	105.6	1.239
405.	8.58	34.60	0.35	2.76	26.89	124.6	700.	6.07	34.53	27.20	97.6	1.341
506.	7.50	34.57	0.60		27.03	112.3	800.	5.42	34.54	27.28	89.9	1.436
607.	6.74	34.54	0.58	2.56	27.11	105.2	1000.	4.48	34.56	27.41	78.5	1.606
807.	5.38	34.54	0.69	3.23	27.29	89.3	1200.	3.83	34.59	27.50	70.1	1.757
1009.	4.45	34.56	1.25		27.41	78.1	1500.	3.03	34.61	27.59	60.9	1.956
1209.	3.81	34.59	1.41	3.05	27.50	69.7						
1510.	3.01	34.61	1.78	2.61	27.59	60.7						

CROMWELL 10, STATION 10, 14-28N LAT, 153-57W LONG, NOV. 9, 1964, 1900 G.C.T.
DRY BULB 25.7 WET BULB 23.5 WIND SPEED 26, DIR. 07 BAR. 14 WEATHER 02 VIS. 8 CLOUD TYPE 8, COVER 6

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	26.02	33.91	4.87	0.38	22.23	561.3	0.	26.02	33.91	22.23	561.3	0.000
10.	25.99	33.90	4.85	0.34	22.23	561.5	10.	25.99	33.90	22.23	561.5	0.057
30.Δ	25.99	33.90			22.23	562.3	20.	25.98	33.90	22.23	561.9	0.113
50.Δ	25.99	33.90			22.23	563.1	30.	25.99	33.90	22.23	562.3	0.170
74.	20.77	34.48	4.84	0.67	24.18	377.4	50.	25.99	33.90	22.23	563.1	0.283
98.	16.33	34.41	2.95	1.51	25.24	277.1	75.	20.56	34.48	24.24	371.7	0.401
124.	13.59	34.31	3.50	2.18	25.76	227.9	100.	16.06	34.40	25.29	271.7	0.482
149.	12.29	34.24	3.26	1.60	25.96	208.8	150.	12.26	34.25	25.97	207.7	0.603
171.	11.71	34.42	1.40	2.20	26.21	185.5	200.	10.81	34.47	26.42	166.6	0.697
186.	11.17	34.45	1.27	2.27	26.34	174.0	250.	9.74	34.48	26.61	148.7	0.776
218.	10.41	34.48	1.08	2.35	26.50	159.4	300.	8.98	34.45	26.71	139.9	0.849
243.	9.81	34.47	1.01	2.53	26.59	150.7	400.	7.65	34.44	26.91	122.0	0.981
268.	9.58	34.51		2.68	26.66	144.5	500.	6.81	34.48	27.06	108.8	1.098
292.	9.12	34.46	0.94	2.55	26.70	141.3	600.	6.14	34.49	27.15	100.7	1.204
387.	7.79	34.44	0.70		26.89	124.2	700.	5.54	34.51	27.25	92.3	1.301
482.	6.94	34.48	0.63	3.02	27.04	110.5	800.	5.03	34.53	27.32	85.2	1.391
576.	6.29	34.48	0.70	3.27	27.13	102.9	1000.	4.20	34.55	27.43	75.8	1.554
766.	5.19	34.53	0.80	3.20	27.30	87.1	1200.	3.52	34.57	27.52	67.4	1.699
956.	4.36	34.54	1.02	3.07	27.40	77.9						
1135.	3.74	34.57	1.19	3.20	27.49	69.7						
1356.	3.08	34.59	1.58	2.92	27.57	62.0						

CROMWELL 10, STATION 11, 16- ON LAT, 154- 4W LONG, NOV. 10, 1964, 0500 G.C.T.
DRY BULB 25.5 WET BULB 22.7 WIND SPEED 28, DIR. 07 BAR. 16 WEATHER 60 VIS. 6 CLOUD TYPE 8, COVER 7

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.51	34.39	5.00	0.25	22.75	511.6	0.	25.51	34.39	22.75	511.6	0.000
10.	25.50	34.38	5.02		22.74	512.5	10.	25.50	34.38	22.74	512.5	0.052
30.Δ	25.46	34.38			22.75	512.1	20.	25.48	34.38	22.75	512.4	0.103
50.Δ	25.42	34.38			22.77	511.7	30.	25.46	34.38	22.75	512.1	0.155
77.	23.32	34.88	5.28	0.24	23.77	416.8	50.	25.42	34.38	22.77	511.7	0.258
101.	21.99	35.06	5.10	0.27	24.29	368.5	75.	23.50	34.84	23.69	424.8	0.376
125.	20.94	35.14	5.05	0.32	24.64	335.9	100.	22.04	35.06	24.27	370.0	0.476
150.	18.68	34.92	4.55	0.40	25.06	296.1	150.	18.68	34.92	25.06	296.1	0.644
174.	15.04	34.42	3.49	1.48	25.54	250.8	200.	12.69	34.27	25.91	215.1	0.773
190.	13.58	34.29	4.21	0.71	25.74	230.9	250.	11.16	34.56	26.42	167.3	0.869
223.	11.22	34.35	2.48	2.02	26.25	183.1	300.	10.77	34.70	26.60	151.2	0.949
250.	11.16	34.56	1.26	2.17	26.42	167.3	400.	9.45	34.62	26.77	137.0	1.095
274.	10.80	34.62	1.63	2.11	26.54	157.1	500.	8.47	34.58	26.89	126.2	1.228
299.	10.78	34.70	0.28	2.59	26.60	151.4	600.	7.39	34.55	27.03	113.7	1.349
398.	9.47	34.62	0.38	2.18	26.76	137.2	700.	6.51	34.53	27.14	104.1	1.459
498.	8.49	34.53	0.33		26.89	126.4	800.	5.80	34.52	27.22	96.3	1.560
598.	7.41	34.55	0.45		27.03	113.9	1000.	4.79	34.54	27.36	83.8	1.742
798.	5.81	34.52	0.67	2.80	27.22	96.4	1200.	4.02	34.56	27.46	74.4	1.902
997.	4.80	34.54	0.90	2.44	27.36	83.9						
1196.	4.06	34.56	1.19	3.17	27.45	74.9						
1496.	3.22	34.59	1.57	3.20	27.56	64.6						

ΔFROM BT DATA

Table 3.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 10, STATION 12, 17-29N LAT, 153-56W LONG, NOV. 10, 1964, 1400 G.C.T.
DRY BULB 24.8 WET BULB 20.9 WIND SPEED 24, DIR. 08 BAR. 18 WEATHER 01 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	25.36	34.44	4.76	0.28	22.83	503.7	0.	25.36	34.44	22.83	503.6	0.000
9.△	25.34	34.43	4.78	0.42	22.83	504.1	10.	25.34	34.43	22.83	504.2	0.051
30.△	25.34	34.43			22.83	505.0	20.	25.34	34.43	22.83	504.6	0.102
50.△	25.34	34.43			22.83	505.7	30.	25.34	34.43	22.83	505.0	0.152
77.	23.40	34.67	5.16	0.25	23.59	434.1	50.	25.34	34.43	22.83	505.7	0.254
102.	22.22	34.82	5.11	0.38	24.04	392.0	75.	23.57	34.65	23.52	440.3	0.373
126.	21.51	34.96	5.02	0.37	24.34	363.9	100.	22.30	34.81	24.01	394.7	0.479
152.	19.32	34.80	4.51	0.54	24.81	320.4	150.	19.52	34.82	24.77	323.9	0.660
177.	16.98	34.61	4.00	0.68	25.24	279.6	200.	14.85	34.39	25.56	249.5	0.804
192.	15.60	34.47	3.78	0.99	25.45	259.6	250.	11.10	34.23	26.18	190.6	0.915
227.	12.57	34.22	3.96	1.12	25.89	217.5	300.	10.73	34.59	26.53	158.4	1.003
253.	10.96	34.24	2.63	2.09	26.21	187.3	400.	9.53	34.57	26.71	142.0	1.155
279.	10.77	34.51	1.00	2.63	26.45	164.7	500.	8.42	34.54	26.87	128.2	1.291
304.	10.72	34.60	0.46	2.40	26.53	157.8	600.	7.30	34.49	27.00	116.4	1.415
405.	9.45	34.56	0.38	2.82	26.72	141.5	700.	6.48	34.48	27.10	107.2	1.528
507.	8.35	34.54	0.35	2.55	26.88	127.3	800.	5.87	34.49	27.19	99.6	1.632
608.	7.21	34.49	0.45	2.91	27.01	115.6	1000.	4.84	34.50	27.32	87.5	1.821
808.	5.83	34.49	0.61	3.18	27.19	99.0	1200.	3.98	34.52	27.43	76.8	1.988
1011.	4.79	34.50	0.88	3.42	27.32	86.9						
1183.	4.01	34.52	1.05	3.40	27.43	77.1						
1406.	3.40	34.56	1.33	2.60	27.52	68.4						

CROMWELL 10, STATION 13, 19- ON LAT, 153-58W LONG, NOV. 10, 1964, 2300 G.C.T.
DRY BULB 25.8 WET BULB 22.5 WIND SPEED 23, DIR. 07 BAR. 18 WEATHER 02 VIS. 7 CLOUD TYPE 8, COVER 5

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.38	34.56	4.79	0.34	22.91	495.6	0.	25.38	34.56	22.91	495.6	0.000
11.△	25.42	34.57	4.88	0.29	22.91	496.5	10.	25.42	34.57	22.91	496.4	0.050
30.△	25.40	34.59			22.93	495.2	20.	25.42	34.58	22.92	496.0	0.100
50.△	25.38	34.59			22.94	495.4	30.	25.40	34.59	22.93	495.2	0.150
75.	25.36	34.59			22.94	495.8	50.	25.38	34.59	22.94	495.4	0.250
105.	22.42	34.87	5.14	0.27	24.02	393.9	75.	25.36	34.59	22.94	495.8	0.374
130.	21.45	34.98	4.92	0.30	24.38	361.0	100.	22.95	34.82	23.83	412.0	0.489
155.	20.64	35.03	4.73	0.40	24.63	337.2	150.	20.80	35.03	24.59	341.5	0.679
185.	19.42	34.96	4.39	0.80	24.90	312.5	200.	18.84	34.90	25.00	303.4	0.841
203.	18.70	34.88	4.33	0.47	25.02	301.2	250.	15.12	34.51	25.59	248.3	0.980
230.	16.49	34.67	4.40	1.13	25.40	265.8	300.	11.89	34.21	26.02	207.3	1.095
255.	14.80	34.47	4.35	0.92	25.63	244.5	400.	8.24	34.12	26.57	154.7	1.278
276.*	13.42*	34.33	4.49	0.96	25.81	227.1	500.	6.79	34.21	26.85	128.8	1.421
283.	13.02	34.29	4.58	1.02	25.86	222.4	600.	5.93	34.31	27.04	110.6	1.542
310.	11.22	34.17	3.91	1.51	26.11	198.3	700.	5.45	34.33	27.11	104.7	1.651
408.	8.12	34.13	2.96	1.88	26.59	152.3	800.	4.95	34.46	27.27	89.7	1.749
510.	6.73	34.21	1.52		26.85	128.0						
518.*	6.69	34.20	1.75	2.76	26.85	128.3						
610.	5.82	34.34		3.26	27.08	107.4						
813.	4.90	34.48	1.04	3.48	27.30	87.6						

TEMPERATURE ERROR TERM AT 100. METERS IS 0.12
TEMPERATURE ERROR TERM AT 700. METERS IS 0.14
SALINITY ERROR TERM AT 700. METERS IS 0.07

CROMWELL 10, STATION 14, 20-32N LAT, 153-57W LONG, NOV. 11, 1964, 0900 G.C.T.
DRY BULB 23.3 WET BULB 20.5 WIND SPEED 22, DIR. 07 BAR. 20 WEATHER 00 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.88	34.71	4.83	0.33	23.18	470.2	0.	24.88	34.71	23.18	470.2	0.000
10.△	24.86	34.71	4.84	0.38	23.19	470.0	10.	24.86	34.71	23.19	470.0	0.047
30.△	24.86	34.71			23.19	470.8	20.	24.86	34.71	23.19	470.3	0.095
50.△	24.86	34.71			23.19	471.6	30.	24.86	34.71	23.19	470.8	0.142
77.	23.58	34.94	5.09	0.27	23.74	419.7	50.	24.86	34.71	23.19	471.6	0.237
102.	22.29	35.00	5.00	0.32	24.16	380.9	75.	23.70	34.92	23.69	424.4	0.350
127.	20.81	34.95	4.74	0.38	24.53	346.3	100.	22.40	35.00	24.13	383.8	0.452
153.	19.24	34.93	4.38	0.52	24.93	309.1	150.	19.36	34.93	24.89	311.9	0.627
155.*	19.22*	34.93	4.38	0.57	24.93	308.7	200.	16.20	34.58	25.40	265.2	0.772
177.	17.94	34.79	4.25	0.60	25.14	288.7	250.	12.51	34.21	25.89	218.0	0.894
192.	16.76	34.65	4.23	0.77	25.32	272.2	300.	10.28	34.14	26.26	183.7	0.996
225.*	14.13*	34.34	3.98	1.16	25.67	239.3	400.	8.19	34.16	26.61	151.0	1.164
227.	13.92	34.32	3.96	1.04	25.70	236.5	500.	6.77	34.16	26.81	132.1	1.307
253.	12.40	34.20	4.08	1.15	25.91	216.4	600.	5.73	34.17	26.95	118.7	1.434
280.	10.98	34.14	4.25	1.28	26.13	195.6	700.	5.05	34.25	27.10	105.5	1.547
309.*	10.02	34.15	3.72	1.68	26.31	179.1	800.	4.53	34.33	27.22	94.0	1.648
405.*	8.12	34.16	2.77	2.20	26.62	150.0	1000.	3.96	34.50	27.41	76.5	1.821
603.*	5.70	34.17	1.16	3.34	26.96	118.4	1200.	3.42	34.54	27.50	68.6	1.968
1012.	3.95	34.51	1.16	3.08	27.42	75.6	1500.	2.80	34.58	27.59	60.2	2.164
1212.	3.39	34.54	1.33	2.60	27.50	68.3						
1512.	2.78	34.58	1.68	3.05	27.59	60.1						

TEMPERATURE ERROR TERM AT 700. METERS IS 0.11
TEMPERATURE ERROR TERM AT 800. METERS IS 0.15

△FROM BT DATA
*INTERPOLATED DATA

Table 3.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 10, STATION 15, 22- 1N LAT, 153-56W LONG, NOV. 11, 1964, 1900 G.C.T.
DRY BULB 23.5 WET BULB 20.4 WIND SPEED 20, DIR. 10 BAR. 22 WEATHER 03 VIS. 7 CLOUD TYPE 6, COVER 7

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.64	34.85	4.99	0.24	23.36	453.2	0.	24.64	34.85	23.36	453.2	0.000
11.Δ	24.67	34.84	4.91		23.34	455.2	10.	24.67	34.84	23.34	455.1	0.046
30.Δ	24.66	34.85			23.35	455.0	20.	24.68	34.84	23.34	455.8	0.092
50.Δ	24.52	34.89			23.42	448.9	30.	24.66	34.85	23.35	455.0	0.137
75.Δ	24.22	34.96			23.57	436.2	50.	24.52	34.89	23.42	448.9	0.229
106.	22.87	35.20	4.85	0.20	24.14	382.4	75.	24.22	34.96	23.57	436.2	0.340
133.	21.70	35.26	5.04	0.22	24.52	347.5	100.	23.17	35.15	24.02	393.8	0.445
159.	20.71	35.23	4.96	0.26	24.77	324.7	150.	21.06	35.25	24.69	331.9	0.627
186.	19.47	35.12	4.82	0.27	25.01	302.2	200.	18.59	34.98	25.13	291.6	0.785
212.	17.86	34.85	4.63	0.42	25.21	283.7	250.	15.78	34.59	25.50	256.9	0.923
237.	16.87	34.72	4.59	0.47	25.35	271.0	300.	12.33	34.27	25.98	210.9	1.041
265.	14.42	34.43	5.12	0.66	25.68	239.8	400.	8.83	34.06	26.43	168.2	1.232
291.	12.71	34.30	4.95	0.89	25.93	215.9	500.	6.51	34.10	26.80	133.1	1.384
316.	11.76	34.23	5.01	0.88	26.06	203.8	600.	5.46	34.20	27.01	112.7	1.508
420.	8.23	34.04	3.86	1.20	26.51	160.8	700.	4.97	34.31	27.15	99.8	1.616
523.	6.16	34.18	1.62	2.67	26.87	126.3	800.	4.64	34.41	27.27	89.5	1.711
627.	5.31	34.23	1.01	2.89	27.05	109.2	1000.	4.02	34.51	27.42	76.2	1.879
834.	4.56	34.44	1.00	2.55	27.30	86.6	1200.	3.46	34.55	27.51	68.1	2.025
1038.	3.90	34.52	1.17	3.02	27.44	74.5	1500.	2.83	34.60	27.60	59.4	2.219
1242.	3.36	34.56	1.41	2.73	27.52	66.7						
1549.	2.75	34.60	1.70	3.02	27.61	58.5						

CROMWELL 10, STATION 16, 23-28N LAT, 153-57W LONG, NOV. 12, 1964, 0300 G.C.T.
DRY BULB 23.0 WET BULB 21.5 WIND SPEED 19, DIR. 06 BAR. 21 WEATHER 20 VIS. 7 CLOUD TYPE 7, COVER 7

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.10	35.17	4.70	0.39	23.76	414.8	0.	24.10	35.17	23.76	414.8	0.000
9.Δ	24.12	35.17	4.66	0.24	23.75	415.7	10.	24.12	35.17	23.76	415.7	0.042
50.Δ	24.06	35.17			23.77	415.6	20.	24.11	35.17	23.76	416.0	0.084
75.Δ	24.04	35.17			23.78	416.0	30.	24.10	35.17	23.76	416.0	0.126
100.Δ	24.02	35.17			23.78	416.4	50.	24.06	35.17	23.77	415.6	0.209
123.	21.82	35.20	4.84	0.28	24.44	354.6	75.	24.04	35.17	23.78	416.0	0.314
148.	20.73	35.12	4.59	0.33	24.68	332.7	100.	24.02	35.17	23.78	416.4	0.419
172.	19.40	35.00	4.50	0.36	24.96	308.6	150.	20.62	35.11	24.70	330.7	0.607
186.	18.64	34.92	4.48	0.42	25.07	296.3	200.	17.83	34.83	25.20	284.1	0.762
219.	16.58	34.69	4.48	0.59	25.39	266.1	250.	14.24	34.45	25.73	234.4	0.893
245.	14.47	34.47	4.36	0.71	25.70	237.3	300.	12.33	34.30	26.00	208.6	1.005
270.	13.51	34.38	4.43	0.96	25.83	225.1	400.	9.07	34.10	26.42	169.0	1.195
294.	12.56	34.32	4.69	0.95	25.97	211.6	500.	6.92	34.06	26.72	141.2	1.352
393.	9.26	34.11	4.31	1.25	26.40	171.2	600.	5.50	34.16	26.97	116.5	1.482
492.	7.06	34.06	2.86	2.17	26.69	143.4	700.	4.83	34.27	27.14	100.8	1.592
591.	5.58	34.15	1.35	2.75	26.96	118.2	800.	4.53	34.38	27.26	90.5	1.688
790.	4.56	34.37	0.84	2.80	27.25	91.3	1000.	4.03	34.49	27.40	78.3	1.859
987.	4.07	34.48	1.22	3.12	27.39	79.1	1200.	3.41	34.55	27.51	67.5	2.007
1185.	3.46	34.55	1.28	3.07	27.50	68.2						
1453.	2.82	34.58	1.65	3.16	27.59	60.2						

CROMWELL 10, STATION 17, 23-30N LAT, 151- 0W LONG, NOV. 12, 1964, 2300 G.C.T.
DRY BULB 23.2 WET BULB 19.8 WIND SPEED 19, DIR. 11 BAR. 23 WEATHER 02 VIS. 7 CLOUD TYPE 6, COVER 7

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.73	35.24			23.92	399.3	0.	23.73	35.24	23.92	399.3	0.000
9.Δ	23.74	35.24			23.92	399.9	10.	23.74	35.24	23.92	400.0	0.040
50.Δ	23.74	35.24			23.92	401.5	20.	23.74	35.24	23.92	400.5	0.081
75.Δ	23.73	35.24			23.92	402.2	30.	23.75	35.24	23.92	400.9	0.121
95.	21.22	35.19			24.60	338.5	50.	23.74	35.24	23.92	401.5	0.202
120.	20.46	35.19			24.80	319.7	75.	23.73	35.24	23.92	402.2	0.303
137.	19.88	35.20			24.96	304.9	100.	20.97	35.19	24.66	332.3	0.396
165.	19.17	35.10			25.07	295.5	150.	19.55	35.17	25.03	299.5	0.595
181.	18.65	35.02			25.14	289.2	200.	17.41	34.81	25.29	275.3	0.700
214.	16.22	34.63			25.43	262.2	250.	13.49	34.29	25.77	230.6	0.827
233.	14.48	34.40			25.64	242.3	300.	11.60	34.24	26.10	199.6	0.936
261.	13.01	34.26			25.84	223.8	400.	9.08	34.10	26.42	169.5	1.122
284.	12.10	34.26			26.02	207.1	500.	6.87	34.03	26.70	142.9	1.279
382.	9.54	34.12			26.36	174.8	600.	5.55	34.11	26.93	120.6	1.412
483.	7.18	34.03			26.65	147.2	700.	4.85	34.25	27.12	102.7	1.525
575.	5.78	34.08			26.88	125.7	800.	4.50	34.39	27.27	89.5	1.622
772.	4.60	34.36			27.24	92.4	1000.	3.94	34.50	27.42	76.1	1.790
971.	4.01	34.49			27.40	77.5	1200.	3.45	34.56	27.51	67.3	1.935
1170.	3.53	34.54			27.49	69.7						
1471.	2.88	34.59			27.59	60.3						

ΔFROM BT DATA

Table 3.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 10, STATION 18, 21-59N LAT, 150-59W LONG, NOV. 13, 1964, 0900 G.C.T.
DRY BULB 23.4 WET BULB 21.0 WIND SPEED 20, DIR. 09 BAR. 21 WEATHER 60 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.04	35.02			23.67	423.9	0.	24.04	35.02	23.67	423.9	0.000
9.	24.12	35.03			23.65	425.8	10.	24.12	35.03	23.65	425.8	0.043
30.Δ	24.12	35.04			23.66	425.9	20.	24.14	35.04	23.65	426.2	0.086
50.Δ	24.12	35.05			23.66	425.9	30.	24.12	35.04	23.66	425.9	0.129
75.Δ	24.12	35.05			23.66	426.9	50.	24.12	35.05	23.66	425.9	0.214
100.Δ	24.02	35.08			23.72	422.9	75.	24.12	35.05	23.66	426.9	0.322
121.	22.23	35.15			24.29	369.2	100.	24.02	35.08	23.72	422.9	0.429
144.	21.52	35.18			24.51	348.9	150.	21.34	35.20	24.57	343.0	0.622
168.	20.76	35.23			24.75	326.3	200.	19.82	35.00	25.04	300.1	0.784
182.	20.24	35.19			24.86	316.4	250.	14.69	34.45	25.63	243.5	0.921
215.	17.71	34.80			25.21	283.9	300.	11.67	34.15	26.01	207.8	1.035
241.	15.23	34.51			25.56	250.2	400.	8.31	34.09	26.53	158.2	1.219
265.	13.88	34.36			25.74	233.8	500.	7.20	34.26	26.83	130.7	1.365
289.	12.26	34.19			25.93	215.4	600.	6.29	34.37	27.04	111.6	1.488
385.	8.60	34.07			26.47	163.6	700.	5.41	34.40	27.17	98.8	1.594
482.	7.34	34.23			26.79	134.7						
579.	6.68	34.37			26.99	116.5						
774.	4.75	34.37			27.23	93.5						

TEMPERATURE ERROR TERM AT 600. METERS IS 0.14
TEMPERATURE ERROR TERM AT 700. METERS IS 0.11

CROMWELL 10, STATION 19, 20-28N LAT, 150-58W LONG, NOV. 13, 1964, 1900 G.C.T.
DRY BULB 23.9 WET BULB 22.0 WIND SPEED 25, DIR. 08 BAR. 20 WEATHER 16 VIS. 6 CLOUD TYPE 6, COVER 8

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.19	35.05			23.64	426.0	0.	24.19	35.05	23.64	426.0	0.000
11.Δ	24.18	35.05			23.65	426.1	10.	24.18	35.05	23.65	426.1	0.043
30.Δ	24.18	35.05			23.65	426.9	20.	24.18	35.05	23.65	426.4	0.086
50.Δ	24.18	35.05			23.65	427.6	30.	24.18	35.05	23.65	426.9	0.129
76.	22.97	35.12			24.05	389.8	50.	24.18	35.05	23.65	427.6	0.215
100.	21.90	35.12			24.36	361.7	75.	23.03	35.12	24.03	391.5	0.318
124.	21.30	35.22			24.60	339.5	100.	21.90	35.12	24.36	361.7	0.413
151.	19.89	35.01			24.82	319.4	150.	19.95	35.02	24.81	320.1	0.585
174.	18.65	34.89			25.04	298.3	200.	16.99	34.67	25.28	276.1	0.735
189.	17.80*	34.76			25.16	288.0	250.	12.86	34.23	25.84	222.8	0.861
222.	15.17	34.49			25.56	249.9	300.	10.33	34.11	26.22	187.4	0.964
248.	12.99	34.24			25.83	224.6	400.	7.55	34.03	26.60	151.3	1.135
274.	11.52	34.16			26.05	203.6	500.	5.74	34.07	26.87	125.0	1.274
298.	10.41	34.11			26.21	188.4	600.	5.22	34.24	27.07	106.8	1.392
395.	7.67	34.03			26.58	152.8	700.	4.78	34.36	27.21	93.8	1.493
493.	5.80	34.06			26.86	126.5	800.	4.42	34.44	27.32	84.6	1.583
591.	5.26	34.23			27.06	108.2	1000.	3.90	34.53	27.44	73.5	1.743
801.	4.42	34.44			27.32	84.5	1200.	3.41	34.56	27.52	67.0	1.885
1003.	3.89	34.53			27.45	73.4	1500.	2.77	34.60	27.61	58.4	2.076
1203.	3.40	34.56			27.52	66.9						
1504.	2.76	34.60			27.61	58.4						

CROMWELL 10, STATION 20, 18-59N LAT, 151- 1W LONG, NOV. 14, 1964, 0400 G.C.T.
DRY BULB 24.8 WET BULB 22.5 WIND SPEED 20, DIR. 14 BAR. 15 WEATHER 02 VIS. 6 CLOUD TYPE , COVER 8

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.65	34.69			23.23	465.0	0.	24.65	34.69	23.23	465.0	0.000
12.Δ	24.70	34.70			23.23	466.2	10.	24.69	34.70	23.23	466.0	0.047
30.Δ	24.78	34.71			23.21	468.5	20.	24.74	34.70	23.22	467.3	0.094
50.Δ	24.78	34.72			23.22	468.6	30.	24.78	34.71	23.21	468.5	0.141
75.Δ	24.52	34.81			23.36	455.6	50.	24.78	34.72	23.22	468.6	0.235
99.	23.09	35.05			23.97	399.0	75.	24.52	34.81	23.36	455.6	0.352
123.	21.72	35.11			24.40	358.5	100.	23.03	35.06	23.99	397.0	0.459
148.	20.44	35.02			24.68	332.5	150.	20.41	35.03	24.70	331.0	0.643
173.	19.85	35.10			24.90	312.7	200.	17.68	34.79	25.21	283.3	0.798
187.	18.75	34.94			25.06	297.6	250.	12.84	34.25	25.87	220.7	0.925
221.	15.77	34.55			25.47	258.4	300.	10.73	34.16	26.19	190.4	1.028
247.	13.04	34.27			25.84	223.3	400.	8.31	34.16	26.59	152.8	1.201
272.	11.69	34.18			26.03	205.2	500.	6.58	34.22	26.88	124.9	1.342
330.	10.00	34.17			26.32	177.7	600.	5.78	34.33	27.08	107.3	1.459
399.	8.33	34.16			26.59	153.1	700.	5.44	34.44	27.20	96.6	1.562
538.	6.14	34.26			26.97	116.7	800.	4.99	34.48	27.29	88.3	1.655
678.	5.54	34.42			27.17	98.7	1000.	4.21	34.52	27.41	77.6	1.823
817.	4.92	34.49			27.30	87.2						
1030.	4.10	34.52			27.42	76.9						

ΔFROM BT DATA
*INTERPOLATED DATA

Table 3.--Continued

CROMWELL 10, STATION 21, 17-30N LAT, 151- OW LONG, NOV. 14, 1964, 1400 G.C.T.
DRY BULB 24.2 WET BULB 22.8 WIND SPEED 16, DIR. 13 BAR. 16 WEATHER 01 VIS. CLOUD TYPE , COVER

ORIGINAL DATA					DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.15	34.09			22.63	522.7	0.	25.15	34.09	22.63	522.7	0.000
11.Δ	25.14	34.09			22.63	522.9	10.	25.14	34.09	22.63	522.8	0.053
30.Δ	25.14	34.09			22.63	523.6	20.	25.14	34.07	22.61	525.0	0.105
51.	25.08	34.55			23.00	489.6	30.	25.14	34.09	22.63	523.6	0.158
77.	23.09	35.01			23.94	401.0	50.	25.10	34.52	22.97	492.0	0.261
126.	20.89	35.16			24.66	333.2	75.	23.27	34.98	23.86	408.0	0.374
153.	19.62	35.09			24.95	306.9	100.	21.94	35.16	24.38	359.8	0.471
177.	18.00	34.85			25.18	285.8	150.	19.78	35.11	24.92	309.6	0.639
192.	16.64	34.65			25.35	269.5	200.	15.73	34.53	25.47	258.1	0.782
227.	12.80	34.24			25.86	220.4	250.	11.24	34.23	26.15	193.0	0.896
254.	11.04	34.24			26.20	188.7	300.	9.72	34.36	26.52	158.2	0.985
279.	10.14	34.32			26.42	167.9	400.	8.64	34.47	26.78	135.2	1.133
305.	9.64	34.37			26.54	156.5	500.	7.38	34.47	26.97	117.6	1.260
406.	8.59	34.47			26.79	134.4	600.	6.46	34.46	27.09	107.0	1.374
506.	7.30	34.47			26.98	116.8	700.	5.76	34.48	27.19	97.5	1.477
608.	6.40	34.46			27.10	106.3	800.	5.19	34.51	27.28	89.2	1.571
809.	5.15	34.51			27.29	88.6	1000.	4.37	34.53	27.39	79.3	1.742
1010.	4.34	34.53			27.40	78.9	1200.	3.73	34.56	27.48	71.0	1.894
1210.	3.70	34.56			27.49	70.6	1500.	2.93	34.60	27.59	60.5	2.094
1511.	2.91	34.60			27.60	60.2	2000.	2.14	34.64	27.70	50.3	2.376
1949.	2.19	34.64			27.69	50.9	2500.	1.82	34.66	27.74	46.9	2.623
2447.	1.85	34.66			27.73	47.2	3000.	1.62	34.68	27.77	44.5	2.857
2946.	1.66	34.68			27.76	44.9						
3943.	1.48	34.70			27.79	43.7						

CROMWELL 10, STATION 22, 15-58N LAT, 151- OW LONG, NOV. 15, 1964, 0100 G.C.T.
DRY BULB 24.1 WET BULB 23.5 WIND SPEED 10, DIR. 13 BAR. 14 WEATHER 16 VIS. 7 CLOUD TYPE 7, COVER 9

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.47	33.81			22.32	552.2	0.	25.47	33.81	22.32	552.2	0.000
9.Δ	25.43	33.81			22.33	551.4	10.	25.43	33.81	22.33	551.4	0.056
30.Δ	25.38	33.81			22.35	550.8	20.	25.40	33.81	22.34	551.1	0.111
50.Δ	25.32	33.84			22.39	547.6	30.	25.38	33.81	22.35	550.8	0.167
74.	21.96	34.51			23.88	406.4	50.	25.32	33.84	22.39	547.6	0.277
98.	18.27	34.56			24.89	310.6	75.	21.80	34.52	23.93	401.5	0.397
124.	15.13	34.43			25.52	250.5	100.	18.01	34.55	24.95	305.0	0.486
148.	12.60	34.34			25.98	207.2	150.	12.44	34.34	26.01	204.5	0.614
172.	10.98	34.30			26.25	181.4	200.	9.99	34.31	26.43	164.7	0.707
187.	10.09	34.23			26.36	171.8	250.	9.59	34.45	26.61	148.7	0.786
221.	10.14	34.47			26.53	155.7	300.	9.18	34.48	26.70	140.9	0.859
246.	9.65	34.45			26.60	149.6	400.	7.92	34.45	26.87	125.5	0.994
271.	9.35	34.46			26.66	144.5	500.	6.88	34.46	27.03	111.4	1.113
296.	9.22	34.48			26.70	141.5	600.	6.09	34.47	27.15	101.1	1.220
393.	8.00	34.45			26.86	126.6	700.	5.44	34.49	27.24	92.2	1.318
489.	6.98	34.46			27.02	112.7	800.	4.91	34.51	27.32	85.2	1.408
586.	6.19	34.47			27.13	102.4	1000.	4.14	34.53	27.42	76.0	1.571
777.	5.02	34.51			27.31	86.5	1200.	3.62	34.56	27.50	69.4	1.718
971.	4.22	34.53			27.41	77.1						
1163.	3.77	34.56			27.48	71.1						
1455.	3.14	34.59			27.57	63.4						

TEMPERATURE ERROR TERM AT 200. METERS IS 0.15

CROMWELL 10, STATION 23, 14-30N LAT, 150-57W LONG, NOV. 15, 1964, 1000 G.C.T.
DRY BULB 24.5 WET BULB 23.0 WIND SPEED 13, DIR. 11 BAR. 14 WEATHER 03 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.67	34.17			22.53	532.2	0.	25.67	34.17	22.53	532.2	0.000
10.Δ	25.63	34.17			22.54	531.4	10.	25.63	34.17	22.54	531.4	0.054
30.Δ	25.62	34.17			22.55	531.9	20.	25.63	34.17	22.54	532.0	0.107
50.Δ	25.44	34.22			22.64	523.8	30.	25.62	34.17	22.55	531.9	0.161
77.	21.04	34.66			24.24	371.4	50.	25.44	34.22	22.64	523.8	0.267
102.	19.21	34.77			24.81	318.2	75.	21.40	34.63	24.12	383.4	0.361
127.	14.76	34.40			25.58	245.1	100.	19.36	34.78	24.78	321.5	0.470
153.	12.36	34.25			25.96	209.5	150.	12.56	34.26	25.92	212.6	0.605
177.	10.78	34.22			26.23	183.9	200.	9.65	34.18	26.39	168.4	0.701
191.	10.05	34.21			26.35	172.7	250.	9.20	34.36	26.61	148.8	0.781
226.	9.00	34.17			26.49	159.5	300.	8.76	34.46	26.76	135.6	0.852
253.	9.24	34.39			26.62	147.6	400.	8.03	34.55	26.93	120.1	0.981
278.	9.09	34.46			26.70	140.5	500.	7.14	34.53	27.05	109.7	1.097
304.	8.69	34.46			26.76	134.8	600.	6.43	34.52	27.14	102.2	1.204
404.	8.01	34.55			26.94	119.6	700.	5.77	34.52	27.23	94.5	1.304
505.	7.09	34.53			27.06	109.3	800.	5.19	34.53	27.30	87.5	1.396
606.	6.39	34.52			27.14	101.7	1000.	4.40	34.55	27.41	78.2	1.563
807.	5.15	34.53			27.31	87.1	1200.	3.74	34.57	27.49	70.4	1.714
1007.	4.38	34.55			27.41	77.9	1500.	3.04	34.60	27.58	61.7	1.915
1208.	3.72	34.57			27.49	70.1						
1509.	3.02	34.60			27.59	61.5						

ΔFROM BT DATA

Table 3.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 10, STATION 24, 13- 1N LAT, 150-53W LONG, NOV. 15, 1964, 1900 G.C.T.
DRY BULB 26.4 WET BULB 23.8 WIND SPEED 15, DIR. 08 BAR. 14 WEATHER 01 VIS. 8 CLOUD TYPE 4, COVER 7

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.89	33.62			22.05	578.3	0.	25.89	33.62	22.05	578.3	0.000
10.	25.88	33.62			22.05	578.4	10.	25.88	33.62	22.05	578.4	0.058
20.Δ	25.88	33.62			22.05	578.8	20.	25.88	33.62	22.05	578.8	0.117
30.Δ	25.88	33.62			22.05	579.2	30.	25.88	33.62	22.05	579.2	0.175
50.	22.92	34.66			23.72	420.6	50.	22.92	34.66	23.72	420.6	0.276
75.	20.94	34.91			24.46	350.7	75.	20.94	34.91	24.46	350.7	0.373
100.	15.49	34.49			25.49	253.1	100.	15.49	34.49	25.49	253.1	0.449
124.	12.82	34.26			25.87	216.7	150.	11.42	34.28	26.15	190.5	0.561
149.	11.45	34.27			26.14	191.3	200.	10.96	34.61	26.50	159.0	0.649
173.	11.10	34.44			26.34	173.2	250.	10.15	34.61	26.64	146.1	0.726
187.	11.13	34.56			26.43	165.3	300.	9.64	34.62	26.74	138.0	0.797
221.	10.55	34.62			26.58	151.6	400.	8.67	34.60	26.88	126.1	0.930
247.	10.18	34.61			26.64	146.6	500.	7.61	34.55	27.00	115.5	1.052
297.	9.67	34.62			26.73	138.4	600.	6.72	34.53	27.11	105.6	1.164
394.	8.73	34.60			26.87	126.8	700.	6.03	34.52	27.19	98.2	1.267
492.	7.69	34.55			26.99	116.3	800.	5.48	34.52	27.26	91.9	1.363
589.	6.80	34.53			27.10	106.5	1000.	4.53	34.55	27.39	79.7	1.537
787.	5.55	34.52			27.25	92.8	1200.	3.84	34.57	27.49	71.2	1.689
983.	4.60	34.55			27.39	80.5						
1179.	3.94	34.57			27.47	72.6						
1477.	3.18	34.60			27.57	63.3						

CROMWELL 10, STATION 25, 11-22N LAT, 151- 0W LONG, NOV. 16, 1964, 0500 G.C.T.
DRY BULB 25.5 WET BULB 24.0 WIND SPEED 10, DIR. 11 BAR. 13 WEATHER 02 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.68	33.77			22.23	561.3	0.	25.68	33.77	22.23	561.3	0.000
8.	25.69	33.78			22.23	561.2	10.	25.74	33.78	22.21	563.2	0.057
20.Δ	25.62	33.83			22.29	556.0	20.	25.62	33.83	22.29	556.0	0.113
30.Δ	24.20	34.12			22.94	494.5	30.	24.20	34.12	22.94	494.5	0.166
48.	17.56	34.63			25.12	287.3	50.	17.08	34.63	25.23	276.3	0.244
75.	13.29	34.46			25.94	209.7	75.	13.29	34.46	25.94	209.7	0.305
99.	12.02	34.64			26.32	173.2	100.	11.99	34.64	26.33	172.3	0.353
125.	11.45	34.71			26.49	158.4	150.	11.16	34.73	26.56	152.4	0.435
150.	11.16	34.73			26.56	152.4	200.	10.59	34.73	26.66	143.3	0.509
175.	10.90	34.74			26.61	147.7	250.	10.12	34.72	26.73	137.5	0.580
190.	10.72	34.74			26.64	144.9	300.	9.83	34.72	26.78	133.8	0.648
224.	10.30	34.72			26.70	140.0	400.	9.03	34.66	26.87	127.0	0.780
250.	10.12	34.72			26.73	137.5	500.	8.21	34.61	26.96	119.8	0.905
276.	9.98	34.72			26.76	135.8	600.	7.22	34.57	27.07	109.6	1.020
302.	9.82	34.72			26.78	133.7	700.	6.44	34.55	27.16	101.2	1.127
403.	9.00	34.66			26.87	126.8	800.	5.80	34.55	27.24	94.1	1.226
505.	8.17	34.61			26.96	119.4	1000.	4.73	34.56	27.38	81.6	1.403
605.	7.17	34.57			27.08	109.1	1200.	3.99	34.60	27.49	71.3	1.558
807.	5.76	34.55			27.25	93.6	1500.	3.17	34.61	27.58	62.6	1.762
1010.	4.68	34.56			27.38	81.0						
1209.	3.96	34.60			27.49	70.9						
1510.	3.15	34.61			27.58	62.4						

CROMWELL 10, STATION 26, 10-10N LAT, 147-59W LONG, NOV. 17, 1964, 0200 G.C.T.
DRY BULB 23.8 WET BULB 22.5 WIND SPEED 04, DIR. 33 BAR. 10 WEATHER 03 VIS. 8 CLOUD TYPE 6, COVER 8

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	25.44	33.75	4.60	0.38	22.29	555.7	0.	25.44	33.75	22.29	555.7	0.000
11.Δ	25.42	33.77	4.74	0.37	22.31	554.1	10.	25.44	33.77	22.30	555.0	0.056
20.Δ	25.00	33.81			22.46	539.3	20.	25.00	33.81	22.46	539.3	0.111
30.Δ	19.60	34.01			24.13	380.4	30.	19.60	34.01	24.13	380.4	0.157
52.	14.38	34.38	3.27	1.27	25.65	236.6	50.	14.59	34.35	25.58	243.0	0.220
78.	12.64	34.60	0.75	2.48	26.17	187.1	75.	12.70	34.58	26.15	189.4	0.275
103.	11.66	34.70	0.37	2.73	26.44	162.4	100.	11.74	34.69	26.42	164.4	0.319
128.	11.26	34.73	0.41	2.44	26.54	153.7	150.	10.94	34.73	26.60	148.5	0.398
153.	10.90	34.73	0.34	2.12	26.60	147.9	200.	10.36	34.72	26.69	140.6	0.471
177.	10.57	34.73	0.37	2.53	26.66	142.8	250.	9.93	34.71	26.76	134.9	0.540
192.	10.43	34.72	0.44	2.79	26.68	141.5	300.	9.53	34.68	26.80	131.7	0.608
227.	10.14	34.72	0.57	2.73	26.73	137.4	400.	8.83	34.64	26.88	125.5	0.737
253.	9.90	34.71	0.56	3.26	26.76	134.7	500.	7.97	34.59	26.98	117.4	0.860
279.	9.75	34.70	0.66	2.32	26.78	133.5	600.	6.94	34.55	27.10	107.0	0.973
303.	9.50	34.68	0.53	2.75	26.81	131.4	700.	6.13	34.54	27.19	98.2	1.077
404.	8.81	34.64	0.34	2.48	26.89	125.3	800.	5.49	34.54	27.27	90.8	1.173
507.	7.90	34.59	0.34	2.63	26.99	116.8	1000.	4.55	34.57	27.41	78.6	1.344
607.	6.87	34.55	0.41	3.11	27.10	106.3	1200.	3.85	34.58	27.49	70.9	1.495
808.	5.45	34.54	0.84	3.22	27.28	90.3	1500.	3.08	34.61	27.59	61.5	1.697
1008.	4.52	34.57	1.04	3.20	27.41	78.2	2000.	2.23	34.65	27.69	50.9	1.983
1208.	3.83	34.58	1.43	2.84	27.49	70.7	2500.	1.89	34.67	27.74	47.2	2.232
1509.	3.06	34.61	1.76	3.16	27.59	61.3	3000.	1.70	34.68	27.76	45.6	2.469
2014.	2.21	34.65	2.27	3.14	27.70	50.7	4000.	1.46	34.70	27.79	43.6	2.926
2517.	1.88	34.67	2.55	2.34	27.74	47.1						
3019.	1.69	34.68	2.90	2.76	27.76	45.6						
4009.	1.46	34.70	3.56	2.43	27.79	43.6						

ΔFROM BT DATA

Table 3.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 10, STATION 27, 11-19N LAT, 147-56W LONG, NOV. 17, 1964, 1100 G.C.T.
DRY BULB 24.3 WET BULB 23.4 WIND SPEED 12, DIR. 02 BAR. 13 WEATHER 03 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.43	33.64	4.62	0.55	22.21	563.3	0.	25.43	33.64	22.21	563.3	0.000
10.	25.49	33.65	4.70	0.55	22.20	564.7	10.	25.49	33.65	22.20	564.7	0.057
20.Δ	25.48	33.65			22.20	564.8	20.	25.48	33.65	22.20	564.8	0.114
30.Δ	25.40	33.68			22.25	560.7	30.	25.40	33.68	22.25	560.7	0.170
50.	17.92	34.53	4.12	0.97	24.95	303.0	50.	17.92	34.53	24.95	303.0	0.257
76.	15.60	34.48	3.80	1.03	25.46	255.5	75.	15.63	34.50	25.46	254.9	0.328
99.	12.18	34.30	2.15	2.11	26.03	201.1	100.	12.11	34.30	26.05	199.6	0.385
124.	11.24	34.47	1.13	2.89	26.34	172.3	150.	11.22	34.64	26.47	160.1	0.476
150.	11.22	34.64	0.36	3.24	26.47	160.1	200.	10.59	34.69	26.62	146.9	0.553
173.	11.00	34.68	0.30	2.74	26.55	153.8	250.	10.08	34.66	26.69	141.3	0.626
188.	10.75	34.69	0.22	3.20	26.60	149.1	300.	9.45	34.64	26.78	133.7	0.695
222.	10.35	34.67	0.22	3.36	26.65	144.5	400.	8.13	34.58	26.94	119.5	0.823
248.	10.10	34.66	0.11	2.87	26.69	141.6	500.	7.14	34.52	27.04	110.7	0.939
272.	9.83	34.65	0.20	2.86	26.73	138.3	600.	6.36	34.51	27.14	101.9	1.046
296.	9.51	34.64	0.25	2.89	26.77	134.3	700.	5.70	34.51	27.23	94.3	1.145
394.	8.20	34.58	0.45	2.64	26.93	120.1	800.	5.17	34.52	27.30	87.8	1.237
494.	7.19	34.52	0.39	3.02	27.04	111.3	1000.	4.40	34.55	27.41	77.9	1.405
591.	6.42	34.51	0.63	3.29	27.13	102.7	1200.	3.75	34.57	27.50	70.0	1.555
788.	5.22	34.52	0.75	3.36	27.29	88.5						
985.	4.45	34.55	1.19	3.33	27.40	78.6						
1182.	3.80	34.57	1.47	3.20	27.49	70.8						
1479.	3.04	34.60	1.74	3.20	27.58	61.6						

CROMWELL 10, STATION 28, 13- ON LAT, 148- 1W LONG, NOV. 17, 1964, 2100 G.C.T.
DRY BULB 25.5 WET BULB 23.6 WIND SPEED 12, DIR. 07 BAR. 13 WEATHER 60 VIS. 8 CLOUD TYPE 4, COVER 7

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
1.	25.73	33.72	5.40	0.44	22.17	566.4	0.	25.73	33.72	22.17	566.4	0.000
11.Δ	25.66	33.73	5.39	0.48	22.20	564.0	10.	25.66	33.73	22.20	564.1	0.057
30.Δ	25.66	33.73			22.20	564.8	20.	25.65	33.73	22.21	564.0	0.114
50.Δ	25.66	33.73			22.20	565.5	30.	25.66	33.73	22.20	564.8	0.171
75.	21.85	34.89	5.97	0.45	24.20	376.0	50.	25.66	33.73	22.20	565.5	0.284
100.	20.40	35.01	5.53	0.48	24.68	330.5	75.	21.85	34.89	24.20	376.0	0.403
124.	17.45	34.69	4.89	0.76	25.19	282.8	100.	20.40	35.01	24.68	330.5	0.492
151.	13.77	34.34	3.35	1.71	25.74	230.0	150.	13.89	34.35	25.73	231.8	0.634
174.	12.04	34.43	1.54	2.22	26.16	190.9	200.	11.02	34.56	26.45	163.4	0.733
189.	11.27	34.50	1.46	2.36	26.36	172.2	250.	10.54	34.67	26.62	148.3	0.812
222.	10.82	34.66	0.46	2.67	26.56	153.3	300.	9.96	34.66	26.71	140.4	0.885
248.	10.56	34.67	0.40	2.67	26.62	148.7	400.	8.79	34.60	26.86	127.9	1.020
273.	10.30	34.68	0.32	2.62	26.67	144.0	500.	7.73	34.56	26.99	116.5	1.143
298.	9.98	34.66	0.27	2.80	26.71	140.7	600.	6.79	34.52	27.09	107.4	1.256
396.	8.83	34.60	0.40	2.98	26.85	128.4	700.	5.93	34.52	27.20	97.1	1.360
495.	7.78	34.56	0.40	3.00	26.98	117.0	800.	5.23	34.53	27.30	87.9	1.453
592.	6.87	34.52	0.54	3.07	27.08	108.2	1000.	4.40	34.56	27.42	77.3	1.620
787.	5.30	34.53	0.80	3.30	27.29	88.8	1200.	3.70	34.58	27.50	69.2	1.769
984.	4.46	34.56	0.95	3.20	27.41	78.0						
1179.	3.77	34.57	1.18	3.16	27.49	70.5						
1478.	2.99	34.61	2.00	3.09	27.60	60.2						

CROMWELL 10, STATION 29, 14-28N LAT, 147-59W LONG, NOV. 18, 1964, 0500 G.C.T.
DRY BULB 24.0 WET BULB 22.6 WIND SPEED 11, DIR. 11 BAR. 14 WEATHER 63 VIS. 4 CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.56	33.76	5.62	0.79	22.26	558.5	0.	25.56	33.76	22.26	558.5	0.000
10.Δ	25.64	34.14	5.69		22.52	533.9	10.	25.64	34.14	22.52	533.9	0.055
30.Δ	25.60	34.22			22.59	527.7	20.	25.64	34.24	22.59	527.2	0.108
50.Δ	25.50	34.28			22.67	521.2	30.	25.60	34.22	22.59	527.7	0.162
78.	22.02	34.82	6.12	0.32	24.10	385.7	50.	25.50	34.28	22.67	521.2	0.267
100.	20.81	34.92	5.82	0.31	24.50	347.5	75.	22.43	34.76	23.93	401.1	0.383
125.	19.06	34.86	5.28	0.55	24.92	308.8	100.	20.81	34.92	24.50	347.5	0.478
151.	15.11	34.43	3.55	2.89	25.53	250.9	150.	15.27	34.45	25.50	253.1	0.629
176.	12.76	34.44	1.73	2.17	26.03	203.7	200.	11.79	34.59	26.33	175.3	0.737
190.	12.11	34.55	1.70	2.52	26.24	183.8	250.	10.51	34.60	26.57	153.0	0.820
223.	11.20	34.61	0.67		26.45	163.7	300.	10.19	34.66	26.67	144.2	0.895
250.	10.51	34.60	0.67	2.58	26.57	153.0	400.	9.03	34.62	26.84	130.2	1.033
274.	10.40	34.65	0.30	2.41	26.63	148.0	500.	7.98	34.56	26.95	120.1	1.159
299.	10.20	34.66	0.22	2.49	26.67	144.4	600.	7.13	34.53	27.05	111.4	1.276
398.	9.05	34.62	0.18	3.21	26.83	130.4	700.	6.24	34.52	27.16	101.1	1.384
499.	7.99	34.56	0.41	2.93	26.95	120.2	800.	5.46	34.52	27.26	91.8	1.481
598.	7.15	34.53	0.57	2.71	27.05	111.6	1000.	4.58	34.54	27.38	81.1	1.656
797.	5.48	34.52	1.02	2.69	27.26	92.0	1200.	3.87	34.56	27.47	72.5	1.812
996.	4.60	34.54		3.24	27.38	81.3						
1196.	3.89	34.56	1.38	3.07	27.47	72.8						
1494.	3.11	34.60	2.24	3.11	27.58	62.5						

ΔFROM BT DATA

Table 3.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 10, STATION 30, 15-55N LAT, 147-56W LONG, NOV. 18, 1964, 1400 G.C.T.
DRY BULB 24.4 WET BULB 21.9 WIND SPEED 08, DIR. 07 BAR. 13 WEATHER 01 VIS. CLOUD TYPE , COVER 2

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.06	33.86	4.91	0.59	22.48	536.7	0.	25.06	33.86	22.48	536.7	0.000
10.Δ	25.10	33.86	5.03	0.32	22.47	538.2	10.	25.10	33.86	22.47	538.2	0.054
30.Δ	25.00	33.98			22.59	527.5	20.	25.08	33.90	22.51	535.2	0.108
50.Δ	24.60	34.24			22.91	498.0	30.	25.00	33.98	22.59	527.5	0.162
52.	23.70	34.60	5.18	0.59	23.45	446.6	50.	24.60	34.24	22.91	498.0	0.265
76.	21.34	34.86	5.23	0.35	24.31	364.8	75.	21.27	34.92	24.38	358.2	0.373
101.	20.60	35.22	4.92	0.30	24.79	320.5	100.	20.62	35.21	24.78	321.7	0.459
126.	18.71	34.97	4.58	0.43	25.09	292.4	150.	15.14	34.45	25.54	249.8	0.603
152.	14.82	34.41		0.96	25.58	246.3	200.	10.84	34.19	26.19	187.7	0.713
176.	12.07	34.19		1.39	25.97	209.1	250.	10.06	34.42	26.51	158.9	0.800
196.	11.01	34.18	3.29	1.69	26.16	191.3	300.	9.48	34.50	26.67	144.3	0.877
225.	10.15	34.30	2.05	2.22	26.40	168.4	400.	8.02	34.49	26.89	124.0	1.012
251.	10.06	34.42	1.28	2.58	26.51	158.6	500.	7.07	34.49	27.03	111.9	1.131
277.	9.75	34.49	0.81		26.62	148.9	600.	6.26	34.50	27.14	101.4	1.239
302.	9.46	34.50	0.69	2.69	26.67	144.0	700.	5.60	34.51	27.24	93.1	1.337
402.	7.99	34.49	0.43	2.78	26.90	123.7	800.	5.05	34.52	27.31	86.5	1.428
503.	7.05	34.49	0.55	3.24	27.03	111.7	1000.	4.24	34.54	27.42	76.9	1.593
602.	6.25	34.50	0.55	3.16	27.15	101.3	1200.	3.62	34.57	27.50	69.0	1.741
801.	5.05	34.52	0.81	3.39	27.31	86.5						
995.	4.26	34.54	1.02	3.31	27.41	77.1						
1188.	3.69	34.57	1.24	3.11	27.50	69.6						
1476.	2.94	34.60	1.58	2.86	27.59	60.3						

SALINITY ERROR TERM AT 75. METERS IS 0.05

CROMWELL 10, STATION 31, 17-30N LAT, 147-58W LONG, NOV. 18, 1964, 2400 G.C.T.
DRY BULB 24.0 WET BULB 21.0 WIND SPEED 10, DIR. 05 BAR. 15 WEATHER 01 VIS. 8 CLOUD TYPE 8, COVER 2

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	25.06	33.94	4.78	0.28	22.54	530.9	0.	25.06	33.94	22.54	530.9	0.000
10.Δ	24.78	33.94	5.01	0.27	22.63	523.2	10.	24.78	33.94	22.63	523.2	0.053
30.Δ	24.68	33.94			22.66	521.1	20.	24.69	33.94	22.66	520.9	0.106
50.Δ	24.68	33.94			22.66	521.9	30.	24.68	33.94	22.66	521.1	0.158
76.	23.10	35.12	5.26	0.26	24.02	393.4	50.	24.68	33.94	22.66	521.9	0.263
97.	20.99	34.93	5.08	0.31	24.46	351.4	75.	23.19	35.08	23.96	398.9	0.379
128.	20.02	35.02	4.78	0.32	24.79	321.1	100.	20.87	34.94	24.50	347.9	0.473
153.	18.33	34.86	4.47	0.46	25.10	292.1	150.	18.58	34.89	25.06	295.9	0.635
177.	15.63	34.52	4.13	0.77	25.48	256.2	200.	12.85	34.26	25.87	219.5	0.765
192.	13.53	34.31	3.93	1.02	25.77	228.5	250.	10.11	34.12	26.26	181.8	0.867
227.	11.37	34.18	3.94		26.09	198.4	300.	9.87	34.44	26.55	155.4	0.952
254.	9.96	34.12	4.10	1.60	26.29	179.1	400.	8.38	34.46	26.81	131.9	1.096
279.	10.01	34.34	1.87	2.13	26.46	164.3	500.	7.16	34.44	26.98	116.8	1.222
305.	9.82	34.45	1.02	2.24	26.57	153.6	600.	6.37	34.45	27.09	106.7	1.335
406.	8.28	34.45	0.63	2.87	26.82	131.1	700.	5.74	34.47	27.19	98.0	1.438
507.	7.09	34.44	0.54	2.93	26.99	116.0	800.	5.20	34.49	27.27	90.8	1.534
608.	6.32	34.45	0.54	2.93	27.10	106.0	1000.	4.37	34.51	27.38	80.8	1.707
809.	5.16	34.49	0.88	2.88	27.27	90.2	1200.	3.68	34.55	27.48	71.2	1.861
1011.	4.33	34.51	1.03	3.02	27.38	80.3	1500.	2.91	34.59	27.59	60.9	2.062
1211.	3.65	34.55	1.19	3.08	27.49	70.7	2000.	2.15	34.63	27.68	51.4	2.348
1512.	2.88	34.59	1.54	3.02	27.59	60.6	2500.	1.80	34.66	27.74	46.8	2.598
2011.	2.14	34.63	2.24	2.13	27.69	51.3	3000.	1.61	34.68	27.77	44.5	2.831
2508.	1.80	34.66	2.72	2.40	27.74	46.7	4000.	1.45	34.69	27.79	44.1	3.284
3015.	1.61	34.68	3.00	2.30	27.77	44.4	5000.	1.40	34.71	27.81	44.3	3.740
4004.	1.45	34.69	3.57	2.73	27.79	44.1						
5000.**	1.40**	34.71	4.04	2.82	27.81	44.3						

TEMPERATURE ERROR TERM AT 200. METERS IS 0.10

CROMWELL 10, STATION 32, 19- 2N LAT, 147-59W LONG, NOV. 19, 1964, 1100 G.C.T.
DRY BULB 23.4 WET BULB 20.9 WIND SPEED 04, DIR. 04 BAR. 14 WEATHER 00 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.56	34.74	5.14	0.37	23.30	458.9	0.	24.56	34.74	23.30	458.9	0.000
9.Δ	24.57	34.73	5.12	1.61	23.29	460.2	10.	24.57	34.73	23.29	460.2	0.046
30.Δ	24.50	34.73			23.31	459.0	20.	24.54	34.73	23.29	460.1	0.093
50.Δ	24.42	34.74			23.34	456.8	30.	24.50	34.73	23.31	459.0	0.139
75.Δ	23.90	34.83			23.56	436.5	50.	24.42	34.74	23.34	456.8	0.231
101.	21.28	35.15	5.32	0.20	24.55	343.2	75.	23.90	34.83	23.56	436.5	0.344
124.	20.73	35.24	5.05	0.18	24.77	323.2	100.	21.38	35.14	24.51	346.7	0.442
151.	19.88	35.15	4.85	0.27	24.93	309.0	150.	19.92	35.16	24.92	309.5	0.608
174.	18.59	34.98	4.86	0.35	25.13	290.4	200.	16.63	34.68	25.38	267.1	0.753
188.	17.54	34.82	4.88		25.27	277.6	250.	12.74	34.21	25.85	221.8	0.876
221.	15.01	34.46	4.85	0.57	25.57	248.6	300.	9.87	34.08	26.27	181.8	0.978
247.	12.93	34.23	4.86	0.80	25.83	224.1	400.	7.38	34.12	26.69	142.3	1.142
272.	11.49	34.13	4.76	1.07	26.03	205.2	500.	5.78	34.22	26.98	114.7	1.271
296.	10.04	34.08	4.23	1.29	26.25	184.3	600.	5.16	34.30	27.12	102.1	1.381
394.	7.50	34.12	2.44	2.12	26.68	143.7	700.	4.63	34.37	27.24	91.3	1.478
473.	6.10	34.14	1.65	2.44	26.88	124.2	800.	4.44	34.48	27.35	81.5	1.566
492.	5.78	34.18	1.14	3.27	26.95	117.3	1000.	4.00	34.53	27.43	74.7	1.724
590.	5.32	34.32	0.77	3.07	27.12	102.3						
592.	5.27	34.31	0.72	2.76	27.12	102.4						
721.	4.72	34.44	0.82	3.02	27.29	87.4						
931.	4.10	34.52	1.02	2.93	27.42	76.0						
1000.**	4.00**	34.53**			27.43	74.7						

TEMPERATURE ERROR TERM AT 700. METERS IS 0.12

ΔFROM BT DATA
**EXTRAPOLATED DATA

Table 3.--Continued

CROMWELL 10, STATION 33, 20-23N LAT, 147-59W LONG, NOV. 19, 1964, 1900 G.C.T.
DRY BULB 23.2 WET BULB 20.5 WIND SPEED 11, DIR. 07 BAR. 15 WEATHER 01 VIS. 8 CLOUD TYPE 8, COVER 8

ORIGINAL DATA				DERIVED DATA		INTERPOLATED DATA					
DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.19	34.81	5.14	0.24	23.46	443.3	0.	24.19	34.81	23.46	443.3	0.000
9.Δ	24.31	34.89	5.31	0.27	23.49	441.3	10.	24.32	34.89	23.49	441.2	0.045
30.Δ	24.32	34.90			23.49	441.6	20.	24.34	34.91	23.49	441.2	0.089
50.Δ	24.26	34.91			23.52	440.0	30.	24.32	34.90	23.49	441.6	0.133
75.Δ	24.20	34.92			23.54	438.5	50.	24.26	34.91	23.52	440.0	0.222
101.	21.53	35.15*	5.45	0.60	24.48	349.7	75.	24.20	34.92	23.54	438.5	0.333
127.	20.54	35.16	5.26	0.40	24.76	324.2	100.	21.64	35.14	24.44	353.3	0.433
152.	19.52	35.06	4.85	0.38	24.95	306.6	150.	19.61	35.07	24.94	307.9	0.599
177.	18.06	34.85	4.70	0.58	25.16	287.2	200.	16.87	34.72	25.34	270.2	0.745
192.	17.49	34.79	4.76	0.58	25.25	278.7	250.	12.66	34.22	25.88	219.4	0.868
223.	14.77	34.46	4.85	0.61	25.62	243.7	300.	10.39	34.09	26.20	189.5	0.971
252.	12.52	34.21	5.00	0.96	25.90	217.9	400.	7.63	34.07	26.62	149.4	1.142
280.	11.19	34.12	4.95	1.18	26.08	200.8	500.	6.26	34.18	26.89	123.6	1.280
302.	10.32	34.09	4.93	1.14	26.21	188.4	600.	5.51	34.35	27.12	102.6	1.395
402.	7.59	34.07	3.03	2.22	26.62	148.8	700.	5.03	34.43	27.24	91.8	1.493
506.	6.21	34.19	1.23	2.60	26.91	122.3	800.	4.67	34.46	27.31	86.2	1.583
607.	5.47	34.36	0.61	2.89	27.13	101.4	1000.	4.01	34.51	27.42	76.4	1.747
808.	4.65	34.46	0.74	3.18	27.31	85.9	1200.	3.45	34.54	27.50	69.1	1.895
1010.	3.98	34.51		2.60	27.42	76.0	1500.	2.76	34.59	27.60	59.2	2.090
1212.	3.42	34.54	1.31	3.60	27.50	68.7						
1512.	2.74	34.59	1.82	2.98	27.60	58.9						

CROMWELL 10, STATION 34, 21-57N LAT, 147-59W LONG, NOV. 20, 1964, 0400 G.C.T.
DRY BULB 23.3 WET BULB 20.0 WIND SPEED 07, DIR. 03 BAR. 14 WEATHER 02 VIS. 8 CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.10	34.71	5.28	0.49	23.41	447.9	0.	24.10	34.71	23.41	447.9	0.000
9.	24.01	34.70	5.31	0.25	23.43	446.5	10.	24.00	34.71	23.44	445.8	0.045
30.Δ	23.86	34.88			23.61	430.1	20.	23.92	34.78	23.52	438.6	0.090
50.Δ	23.78	35.00			23.73	419.9	30.	23.86	34.88	23.61	430.1	0.133
74.	23.35	35.25	5.23	0.19	24.04	390.8	50.	23.78	35.00	23.73	419.9	0.219
97.	21.78	35.23	5.44	0.22	24.47	350.4	75.	23.28	35.25	24.06	389.0	0.321
121.	21.02	35.25	5.28	0.29	24.70	329.9	100.	21.67	35.23	24.51	347.3	0.414
145.	19.91	35.16	4.99	0.33	24.93	308.9	150.	19.72	35.14	24.96	305.7	0.578
169.	19.08	35.07	4.97	0.35	25.07	295.6	200.	17.97	34.89	25.22	282.6	0.726
183.	18.62	35.01	5.12	0.31	25.14	289.2	250.	13.52	34.27	25.74	232.7	0.856
216.	16.98	34.73	5.04	0.42	25.33	272.1	300.	10.87	34.07	26.10	199.0	0.965
239.	14.46	34.38	5.08	1.03	25.63	243.5	400.	7.61	34.05	26.60	150.9	1.142
263.	12.61	34.13	4.94	0.87	25.85	222.1	500.	6.22	34.13	26.86	127.1	1.282
286.	11.50	34.10	4.83	1.04	26.00	207.9	600.	5.49	34.25	27.04	109.9	1.402
379.	8.08	34.04	3.71	1.96	26.53	157.9	700.	5.01	34.37	27.20	95.9	1.506
473.	6.51	34.10	1.92	2.62	26.80	132.6	800.	4.65	34.46	27.31	86.1	1.598
566.	5.69	34.20	1.11	2.84	26.98	115.6	1000.	3.99	34.51	27.42	75.7	1.761
753.	4.83	34.43	0.71	2.77	27.26	89.8	1200.	3.44	34.56	27.51	67.6	1.907
940.	4.18	34.50	1.03	2.84	27.39	78.5						
1130.	3.62	34.54	1.31	2.93	27.48	70.5						
1421.	2.95	34.58	1.69	2.93	27.58	61.6						

CROMWELL 10, STATION 35, 23-27N LAT, 147-57W LONG, NOV. 20, 1964, 1400 G.C.T.
DRY BULB 20.1 WET BULB 18.8 WIND SPEED 22, DIR. 05 BAR. 15 WEATHER 01 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.29	35.13	5.18	0.32	23.97	395.0	0.	23.29	35.13	23.97	395.0	0.000
10.Δ	23.32	35.13	5.15	0.25	23.96	396.2	10.	23.32	35.13	23.96	396.2	0.040
50.Δ	23.31	35.13			23.96	397.4	20.	23.33	35.13	23.96	396.8	0.080
75.Δ	23.30	35.13			23.97	398.1	30.	23.33	35.13	23.96	397.2	0.120
99.	21.74	35.24	5.31	0.17	24.49	348.7	50.	23.31	35.13	23.96	397.4	0.200
124.	20.50	35.24	5.14	0.22	24.83	317.3	75.	23.30	35.13	23.97	398.1	0.300
149.	19.28	35.04	4.74		25.00	302.0	100.	21.69	35.24	24.51	347.1	0.394
173.	18.16	34.90	4.83	0.40	25.17	285.8	150.	19.23	35.03	25.01	301.3	0.557
187.	17.65	34.83	4.88	0.44	25.25	279.4	200.	16.96	34.72	25.33	271.6	0.702
221.	15.64	34.54	4.66	0.75	25.49	256.3	250.	13.73	34.35	25.76	230.8	0.828
247.	13.92	34.37	4.75	0.73	25.74	233.4	300.	11.40	34.19	26.09	199.8	0.937
271.	12.52	34.26	4.93	0.87	25.93	214.7	400.	8.84	34.06	26.43	168.1	1.122
295.	11.56	34.20	5.01	0.99	26.07	201.9	500.	6.74	34.03	26.71	141.0	1.279
392.	9.03	34.07	4.46	1.60	26.41	170.5	600.	5.34	34.11	26.96	117.9	1.409
492.	6.88	34.03	2.78	2.01	26.69	143.1	700.	4.77	34.24	27.12	102.4	1.521
588.	5.44	34.10	1.39	2.36	26.93	120.1	800.	4.55	34.36	27.24	91.8	1.619
784.	4.60	34.35	0.72	2.97	27.23	93.2	1000.	4.07	34.49	27.39	78.7	1.791
981.	4.12	34.48	1.03	2.98	27.38	79.6	1200.	3.57	34.55	27.49	69.9	1.942
1175.	3.62	34.53	1.26		27.47	71.5						
1472.	2.94	34.57	1.56	3.11	27.57	62.5						

TEMPERATURE ERROR TERM AT 700. METERS IS 0.10

ΔFROM BT DATA
*INTERPOLATED DATA

Table 3.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 10, STATION 36, 25- ON LAT, 147-58W LONG, NOV. 20, 1964, 2300 G.C.T.
DRY BULB 21.9 WET BULB 18.2 WIND SPEED 15, DIR. 09 BAR. 14 WEATHER 02 VIS. 7 CLOUD TYPE 6, COVER 8

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	22.56	35.40	5.08	0.42	24.38	355.5	0.	22.56	35.40	24.38	355.5	0.000
10.Δ	22.56	35.39	5.04	0.41	24.38	356.6	10.	22.56	35.39	24.38	356.6	0.036
50.Δ	22.52	35.38			24.38	357.7	20.	22.56	35.39	24.37	357.2	0.072
75.Δ	22.44	35.37			24.39	357.2	30.	22.55	35.38	24.37	357.6	0.108
99.	20.98	35.30	4.87	0.19	24.75	324.4	50.	22.52	35.38	24.38	357.7	0.180
124.	20.47	35.27	5.10	0.20	24.86	314.4	75.	22.44	35.37	24.39	357.2	0.270
149.	19.84	35.20	4.98	0.57	24.98	304.3	100.	20.95	35.30	24.75	323.8	0.356
174.	18.40	34.96	4.95	0.86	25.16	287.2	150.	19.80	35.19	24.98	303.8	0.514
188.	17.35	34.79	4.93	0.68	25.29	275.3	200.	16.55	34.67	25.39	265.9	0.657
223.	15.10	34.50	4.99	0.55	25.58	247.7	250.	13.38	34.34	25.83	224.7	0.781
248.	13.47	34.35	5.01		25.81	225.9	300.	11.53	34.22	26.09	200.3	0.888
274.	12.52	34.29	5.09	0.91	25.96	212.6	400.	9.11	34.08	26.40	171.4	1.076
298.	11.59	34.22	5.04	0.99	26.08	201.0	500.	6.66	34.02	26.72	140.8	1.233
397.	9.19	34.08	4.69	1.49	26.39	172.4	600.	5.47	34.11	26.93	120.1	1.365
497.	6.71	34.02	2.79	2.16	26.71	141.6	700.	4.82	34.24	27.11	103.3	1.478
595.	5.51	34.10		2.71	26.92	121.0	800.	4.46	34.37	27.26	90.5	1.576
792.	4.49	34.36	0.75	2.82	27.25	91.2	1000.	3.96	34.48	27.40	77.6	1.746
991.	3.98	34.48	1.04	3.64	27.40	78.0	1200.	3.50	34.54	27.50	69.3	1.895
1188.	3.51	34.53	1.36	3.02	27.48	70.3						
1483.	2.99	34.57	1.53	3.07	27.56	63.2						

CROMWELL 10, STATION 37, 26-30N LAT, 148- OW LONG, NOV. 21, 1964, 0800 G.C.T.
DRY BULB 21.9 WET BULB 19.1 WIND SPEED 27, DIR. 09 BAR. 16 WEATHER 03 VIS. CLOUD TYPE , COVER 8

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	22.17	35.41	5.30		24.50	344.2	0.	22.17	35.41	24.50	344.2	0.000
12.	22.21	35.41	5.32		24.49	345.7	10.	22.20	35.41	24.49	345.5	0.035
50.Δ	22.18	35.40			24.49	347.1	20.	22.22	35.41	24.49	346.3	0.070
75.Δ	22.10	35.39			24.51	346.6	30.	22.22	35.41	24.48	346.9	0.104
98.	19.35	35.03	5.31		24.97	302.7	50.	22.18	35.40	24.49	347.1	0.174
126.	18.09	34.88	5.04		25.18	284.1	75.	22.10	35.39	24.51	346.6	0.262
156.	16.74	34.70	5.04		25.36	267.0	100.	19.22	35.01	24.99	300.7	0.343
176.	15.68	34.58	5.04		25.52	252.9	150.	17.02	34.74	25.33	270.5	0.487
192.	14.87	34.51	5.10		25.64	241.2	200.	14.47	34.47	25.70	236.1	0.615
225.	13.31	34.35	5.12		25.85	222.2	250.	12.41	34.28	25.97	210.4	0.727
252.	12.35	34.28	5.15		25.98	209.6	300.	11.32	34.23	26.14	195.5	0.830
277.	11.64	34.24	5.14		26.09	200.0	400.	9.11	34.10	26.42	169.3	1.014
303.	11.29	34.23	5.17	1.13	26.14	195.0	500.	6.91	34.01	26.67	144.9	1.172
403.	9.03	34.10	4.76	2.90	26.43	168.5	600.	5.54	34.06	26.89	124.1	1.308
508.	6.76	34.01	3.27	2.20	26.69	143.1	700.	4.79	34.17	27.06	108.2	1.426
606.	5.48	34.07	1.79	2.76	26.90	123.0	800.	4.37	34.28	27.20	95.7	1.529
808.	4.35	34.29	0.58		27.21	94.9	1000.	3.80	34.44	27.38	79.2	1.706
1008.	3.78	34.44	0.81	2.97	27.39	78.8	1200.	3.31	34.52	27.49	68.9	1.856
1205.	3.30	34.52	1.20	3.08	27.50	68.7	1500.	2.81	34.57	27.58	61.2	2.054
1506.	2.80	34.57	1.60	3.17	27.58	61.1	2000.	2.12	34.63	27.69	51.0	2.339
2009.	2.11	34.63	0.85	3.29	27.69	50.9	2500.	1.74	34.67	27.75	45.2	2.584
2504.	1.74	34.67	2.47	3.69	27.75	45.2	3000.	1.56	34.68	27.77	43.7	2.911
3004.	1.56	34.68	2.99	2.56	27.77	43.7	4000.	1.49	34.70	27.79	44.0	3.260
4004.	1.49	34.70	3.62	2.20	27.79	44.0						

CROMWELL 10, STATION 38, 25- 2N LAT, 150-58W LONG, NOV. 22, 1964, 0400 G.C.T.
DRY BULB 21.9 WET BULB 20.5 WIND SPEED 20, DIR. 19 BAR. 08 WEATHER 02 VIS. 6 CLOUD TYPE 6, COVER 8

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.29	35.12			23.96	395.7	0.	23.29	35.12	23.96	395.7	0.000
10.	23.33	35.11			23.94	397.9	10.	23.33	35.11	23.94	397.9	0.040
30.Δ	23.24	35.19			24.03	390.4	20.	23.31	35.14	23.97	395.8	0.080
50.Δ	22.90	35.32			24.22	372.4	30.	23.24	35.19	24.03	390.4	0.120
76.	22.54	35.40			24.39	357.8	50.	22.90	35.32	24.22	372.4	0.196
103.	21.49	35.28			24.59	339.4	75.	22.56	35.40	24.38	358.3	0.288
126.	19.93	35.11			24.88	312.3	100.	21.64	35.30	24.56	341.9	0.377
152.	19.28	35.11			25.05	297.0	150.	19.31	35.11	25.04	297.9	0.538
176.	18.51	35.00			25.16	287.1	200.	17.55	34.83	25.27	277.5	0.683
192.	18.01	34.91			25.22	282.2	250.	14.24	34.41	25.70	236.8	0.812
227.	15.70	34.55			25.49	257.0	300.	11.73	34.18	26.02	206.9	0.924
253.	14.06	34.40			25.73	234.2	400.	9.09	34.07	26.39	171.7	1.115
278.	12.71	34.27			25.90	217.8	500.	6.86	34.03	26.70	142.9	1.274
302.	11.65	34.17			26.03	205.9	600.	5.53	34.11	26.93	120.3	1.407
403.	9.04	34.07			26.40	170.9	700.	4.79	34.23	27.11	103.9	1.520
506.	6.74	34.03			26.71	141.4	800.	4.38	34.33	27.24	92.0	1.619
605.	5.48	34.12			26.94	119.3	1000.	3.95	34.48	27.40	78.1	1.791
806.	4.37	34.34			27.24	91.4	1200.	3.51	34.54	27.49	69.8	1.941
1008.	3.94	34.48			27.40	77.7	1500.	2.91	34.57	27.57	62.3	2.142
1209.	3.49	34.54			27.49	69.5						
1510.	2.89	34.57			27.57	62.2						

ΔFROM BT DATA

Table 3.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 10, STATION 39, 25- 1N LAT, 153-59W LONG, NOV. 22, 1964, 2000 G.C.T.
DRY BULB 24.5 WET BULB 22.5 WIND SPEED 22, DIR. 21 BAR. 11 WEATHER 01 VIS. 7 CLOUD TYPE 6, COVER 6

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.31	35.16	5.02		23.99	393.3	0.	23.31	35.16	23.99	393.3	0.000
11.	23.29	35.16			23.99	393.2	10.	23.29	35.16	23.99	393.3	0.040
77.	22.43	35.25	5.05		24.31	365.7	20.	23.27	35.17	24.01	392.1	0.079
102.	21.56	35.23	4.97		24.53	344.8	30.	23.21	35.19	24.03	389.8	0.119
133.	20.98	35.22	4.81		24.69	331.5	50.	22.98	35.22	24.12	382.2	0.196
154.	20.22	35.18	4.80		24.86	315.6	75.	22.48	35.25	24.29	367.2	0.291
178.	19.11	35.01	4.67		25.02	301.0	100.	21.63	35.23	24.52	346.4	0.381
193.	18.54	34.95	4.72		25.12	292.0	150.	20.38	35.19	24.83	318.7	0.548
233.	16.29	34.64	4.66		25.42	263.6	200.	18.25	34.91	25.16	288.3	0.701
254.	14.40	34.44	4.80		25.69	238.3	250.	14.76	34.48	25.64	242.9	0.835
280.	12.89	34.28	4.83		25.88	220.5	300.	12.01	34.21	26.00	209.4	0.949
305.	11.82	34.20	4.83		26.02	206.9	400.	9.75	34.11	26.32	179.4	1.145
406.	9.67	34.11	4.64		26.33	178.2	500.	7.38	34.02	26.62	150.8	1.312
508.	7.20	34.02	3.30		26.64	148.6	600.	5.71	34.07	26.88	125.7	1.452
608.	5.61	34.08	1.56		26.90	123.9	700.	4.85	34.18	27.06	108.1	1.570
810.	4.41	34.31	0.69		27.22	94.1	800.	4.43	34.30	27.20	95.2	1.673
1011.	3.89	34.48	1.02		27.41	77.1	1000.	3.91	34.47	27.40	77.8	1.848
1212.	3.42	34.54	1.29		27.50	68.7	1200.	3.45	34.54	27.50	69.0	1.996
1514.	2.81	34.58	1.60		27.59	60.5	1500.	2.84	34.58	27.59	60.8	2.194
1990.	2.14	34.63	2.09		27.69	51.2	2000.	2.13	34.63	27.69	51.0	2.478
2488.	1.78	34.66	2.51		27.74	46.4	2500.	1.77	34.66	27.74	46.3	2.726
2998.	1.58	34.69	2.74		27.78	43.2	3000.	1.56	34.69	27.78	43.3	2.955
3986.	1.49	34.70	3.48		27.79	44.0						

CROMWELL 10, STATION 40, 24-59N LAT, 157- 0W LONG, NOV. 23, 1964, 1400 G.C.T.
DRY BULB 23.5 WET BULB 21.8 WIND SPEED 17, DIR. 22 BAR. 13 WEATHER 02 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	22.93	35.23			24.15	377.8	0.	22.93	35.23	24.15	377.8	0.000
10.Δ	22.94	35.23			24.15	378.5	10.	22.94	35.23	24.15	378.5	0.038
30.Δ	22.94	35.23			24.15	379.3	20.	22.94	35.23	24.14	379.0	0.076
50.Δ	22.90	35.23			24.16	378.9	30.	22.94	35.23	24.15	379.3	0.114
75.Δ	22.82	35.22			24.17	378.4	50.	22.90	35.23	24.16	378.9	0.191
102.	20.50	35.09			24.72	327.3	75.	22.82	35.22	24.17	378.4	0.286
127.	19.94	35.05			24.83	316.9	100.	20.68	35.10	24.68	331.2	0.376
153.	18.69	34.94			25.07	295.0	150.	18.87	34.96	25.04	297.9	0.534
176.	17.11	34.75			25.31	272.4	200.	15.82	34.61	25.51	254.4	0.673
191.	16.25	34.66			25.45	260.0	250.	13.40	34.33	25.82	225.6	0.794
225.	14.69	34.48			25.66	240.6	300.	11.78	34.22	26.04	204.7	0.903
251.	13.35	34.33			25.82	225.1	400.	9.21	34.10	26.40	171.4	1.093
278.	12.71	34.32			25.94	214.1	500.	7.34	34.04	26.64	148.9	1.254
303.	11.64	34.20			26.06	203.5	600.	5.65	34.10	26.90	123.1	1.392
403.	9.16	34.10			26.41	170.6	700.	4.81	34.20	27.09	105.9	1.507
504.	7.27	34.04			26.65	148.0	800.	4.43	34.32	27.22	93.8	1.608
603.	5.61	34.10			26.91	122.4	1000.	3.87	34.46	27.39	78.5	1.783
804.	4.42	34.32			27.22	93.5	1200.	3.22	34.53	27.51	67.1	1.930
1006.	3.86	34.46			27.39	78.2	1500.	2.74	34.57	27.59	60.3	2.124
1207.	3.20	34.53			27.51	66.8						
1506.	2.73	34.57			27.59	60.2						

CROMWELL 10, STATION 41, 23-30N LAT, 157- 0W LONG, NOV. 23, 1964, 2400 G.C.T.
DRY BULB 25.0 WET BULB 22.6 WIND SPEED 07, DIR. 16 BAR. 15 WEATHER 02 VIS. 7 CLOUD TYPE 8, COVER 6

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	23.62	35.22			23.94	397.6	0.	23.62	35.22	23.94	397.6	0.000
10.Δ	23.53	35.22			23.97	395.5	10.	23.53	35.22	23.97	395.5	0.040
30.Δ	23.30	35.23			24.04	389.2	20.	23.41	35.22	24.00	392.5	0.080
49.	23.15	35.26			24.11	383.6	30.	23.30	35.23	24.04	389.2	0.119
74.	23.30	35.28			24.08	387.3	50.	23.15	35.26	24.11	383.7	0.197
98.	23.19	35.33			24.15	381.6	75.	23.32	35.28	24.08	387.6	0.294
122.	20.81	35.12			24.66	333.9	100.	23.02	35.32	24.19	377.9	0.390
148.	19.40	35.01			24.94	307.1	150.	19.31	35.00	24.96	305.7	0.563
171.	18.48	34.90			25.10	293.4	200.	17.03	34.74	25.33	271.7	0.708
185.	17.90	34.84			25.19	284.4	250.	13.67	34.37	25.79	228.8	0.834
219.	15.74	34.60			25.52	254.0	300.	11.70	34.25	26.08	201.1	0.943
245.	13.88	34.39			25.76	231.1	400.	9.16	34.09	26.40	171.2	1.131
269.	12.98	34.30			25.87	220.5	500.	6.69	34.03	26.72	140.4	1.288
293.	11.93	34.26			26.05	204.2	600.	5.35	34.11	26.95	118.6	1.419
393.	9.36	34.10			26.38	173.6	700.	4.72	34.24	27.12	102.2	1.530
490.	6.87	34.03			26.69	142.9	800.	4.45	34.36	27.25	90.6	1.628
587.	5.46	34.09			26.92	121.0	1000.	3.93	34.47	27.39	78.2	1.798
783.	4.50	34.35			27.24	92.0	1200.	3.35	34.54	27.51	67.5	1.946
979.	4.00	34.46			27.38	79.7						
1176.	3.34	34.54			27.51	67.5						
1470.	2.74	34.58			27.60	59.4						

ΔFROM BT DATA

Table 3.--Continued

ORIGINAL DATA | DERIVED DATA | INTERPOLATED DATA

CROMWELL 10, STATION 42, 21-59N LAT, 157- 0W LONG, NOV. 24, 1964, 1000 G.C.T.
DRY BULB 25.5 WET BULB 23.3 WIND SPEED 13, DIR. 21 BAR. 17 WEATHER 02 VIS. CLOUD TYPE , COVER

DEPTH	TEMP.	SAL.	OXY.	PO4-P	SIGMA-T	DELTA	DEPTH	TEMP.	SAL.	SIGMA-T	DELTA	DYN.DPTH.
0.	24.49	34.99			23.51	438.8	0.	24.49	34.99	23.51	438.8	0.000
10.	24.48	35.00			23.52	438.2	10.	24.48	35.00	23.52	438.2	0.044
30.Δ	24.38	35.02			23.56	434.7	20.	24.44	35.01	23.54	436.7	0.088
50.Δ	24.26	35.04			23.62	430.6	30.	24.38	35.02	23.56	434.7	0.132
78.	22.88	35.16			24.11	384.5	50.	24.26	35.04	23.62	430.6	0.219
102.	21.92	35.20			24.41	356.5	75.	23.05	35.15	24.05	390.2	0.323
127.	20.88	35.23			24.72	327.9	100.	22.00	35.20	24.39	358.7	0.417
153.	20.08	35.14			24.87	314.9	150.	20.18	35.16	24.85	316.1	0.587
177.	18.98	34.99			25.04	299.2	200.	17.10	34.75	25.31	273.3	0.736
192.	17.79	34.84			25.22	282.1	250.	13.59	34.37	25.80	227.1	0.862
226.	15.02	34.48			25.59	247.5	300.	10.67	34.17	26.21	188.5	0.966
252.	13.47	34.36			25.82	225.3	400.	7.91	34.08	26.59	152.6	1.139
278.	11.36	34.19			26.10	198.6	500.	6.62	34.15	26.82	131.1	1.282
303.	10.61	34.17			26.22	187.5	600.	6.02	34.29	27.01	113.3	1.405
403.	7.84	34.08			26.60	151.8	700.	5.53	34.39	27.15	101.0	1.513
503.	6.60	34.15			26.83	130.5	800.	5.10	34.45	27.25	92.3	1.611
604.	6.00	34.30			27.02	112.7	1000.	4.30	34.50	27.38	80.6	1.786
804.	5.08	34.45			27.25	92.0	1200.	3.61	34.53	27.47	71.6	1.940
1004.	4.29	34.50			27.38	80.5	1500.	2.91	34.57	27.57	62.4	2.144
1202.	3.60	34.53			27.47	71.5						
1502.	2.91	34.57			27.57	62.4						

ΔFROM BT DATA

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Created in 1849 the Department of the Interior--a department of conservation--is concerned with the management, conservation, and development of the Nation's water, fish, wildlife, mineral, forest, and park and recreational resources. It also has major responsibilities for Indian and Territorial affairs.

As the Nation's principal conservation agency, the Department works to assure that nonrenewable resources are developed and used wisely, that park and recreational resources are conserved for the future, and that renewable resources make their full contribution to the progress, prosperity, and security of the United States--now and in the future.

UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
BUREAU OF COMMERCIAL FISHERIES
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